LEVEL II

SDAC-TR-77-7

# A COMPARISON OF TELESEISMIC P WAVE AMPLITUDES AND SPECTRA OBSERVED AT SELECTED BASIN AND RANGE SITES AND IN EASTERN NORTH AMERICA, PHASE 1 FINAL REPORT - VOLUME 2



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30 May 1978



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Three Seismic Data Collection System (SDCS) stations were deployed at the Nevada Test Site (NTS) and two in the Eastern United States (EUS) to measure magnitude residuals and spectral differences between NTS and EUS stations. The deployment was intended to determine the degree of anelastic attenuation under NTS. At the Climax Stock (OB2NV) station, the teleseismic body-wave magnitudes are .17 magnitude units (m.u.) lower than at the EUS stations. The magnitudes at the two Pahute Mesa sites are about .2 m.u. higher that at OB2NV,

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a difference that can be accounted for by amplification of low velocity volcanics under Pahute Mesa. Thus local geology must be taken into account in order to evaluate the attenuation under a given site using amplitude data. This correction shows that with respect to corrected amplitude levels OB2NV is equivalent to Pahute Mesa stations. At all NTS sites the higher frequency content of P waves is significantly less than in the EUS. Available data suggests an attenuation effect of about .2 m.u. under NTS. Measurements at a few other Western United States (WUS) sites, including the site of the SHOAL explosion, yield similar figures. These results confirm that body-waves suffer considerable anelastic losses traversing the mantle under the WUS, including the NTS sites.

# A COMPARISON OF TELESEISMIC P WAVE AMPLITUDES AND SPECTRA OBSERVED AT SELECTED BASIN AND RANGE SITES AND IN EASTERN NORTH AMERICA, PHASE 1 FINAL REPORT

VOLUME 2

SEISMIC DATA ANALYSIS CENTER REPORT NO.: SDAC-TR-77-7

| | |
|---|---|
| AFTAC Project Authorization No.: | VELA T/7709 |
| Project Title: | Seismic Data Analysis Center |
| ARPA Order No.: | 2551 |
| Name of Contractor: | TELEDYNE GEOTECH |
| Contract No.: | F08606-78-C-0007 |
| Date of Contract: | 01 October 1977 |
| Amount of Contract: | $2,674,245 |
| Contract Expiration Date: | 30 September 1978 |
| Project Manager: | Robert R. Blandford<br>(703) 836-3882 |

P. O. Box 334, Alexandria, Virginia 22313

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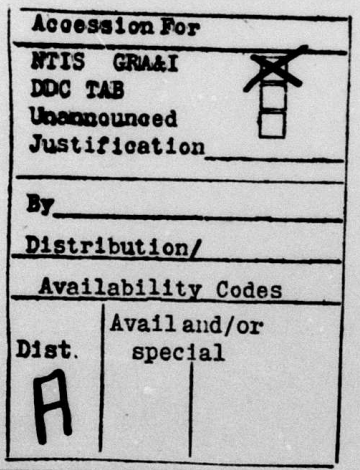


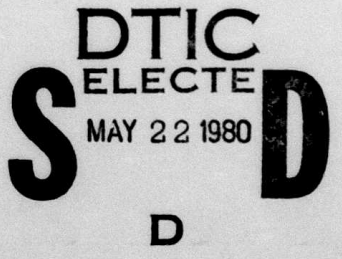

ABSTRACT

Three Seismic Data Collection System (SDCS) stations were deployed at the Nevada Test Site (NTS) and two in the Eastern United States (EUS) to measure magnitude residuals and spectral differences between NTS and EUS stations. The deployment was intended to determine the degree of anelastic attenuation under NTS. At the Climax Stock (OB2NV) station, the teleseismic body-wave magnitudes are .17 magnitude units (m.u.) lower than at the EUS stations. The magnitudes at the two Pahute Mesa sites are about .2 m.u. higher than at OB2NV, a difference that can be accounted for by amplification of low velocity volcanics under Pahute Mesa. Thus local geology must be taken into account in order to evaluate the attenuation under a given site using amplitude data. This correction shows that with respect to corrected amplitude levels OB2NV is equivalent to Pahute Mesa stations. At all NTS sites the higher frequenc content of P waves is significantly less than in the EUS. Available data suggests an attenuation effect of about .2 m.u. under NTS. Measurements at a few other Western United States (WUS) sites, including the site of the SHOAL explosion, yield similar figures. These results confirm that body-waves suffer considerable anelastic losses traversing the mantle under the WUS, including the NTS sites.

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# APPENDIX A

Amplitudes, periods, and magnitude computations
for all events used in magnitude study

1 14 SEP 76 [illegible]:46: 5.2 5.06 EASTER IS. 26.4S 115.8W 179.8 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 84.4 | 74.0 | 0.83 |
| RK-CN | 79.6 | 251.6 | 0.76 |
| OB2NV | 63.6 | 42.7 | 0.94 |

| LOG10 (A/MT) + B MB | LOG10 (A/M) + B MB |
|---|---|
| 5.54 | 5.46 |
| 5.74 | 5.62 |
| 5.27 | 5.24 |

2 15 SEP 76 3:15:20.6 5.84 AUSTRIA 46.2N 13.3E 32.6 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 53.6 | 70.6 | 0.81 |
| RK-CN | 64.4 | 48.2 | 0.49 |
| OB2NV | 85.1 | 56.7 | 1.09 |
| NT2NV | 85.1 | 142.7 | 1.23 |

| LOG10 (A/MT) + B MB | | LOG10 (A/M) + B MB |
|---|---|---|
| 5.27 | | 5.18 |
| 5.17 | | 4.87 |
| 5.51 | ** OMITTED ** | 5.66 |
| 6.00 | ** OMITTED ** | 6.09 |

3 15 SEP 76 9:21:18.4 5.30 AUSTRIA 46.3N 13.2E 32.6 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 53.6 | 62.8 | 0.78 |
| RK-CN | 64.3 | 100.6 | 0.54 |
| OB2NV | 85.0 | 46.3 | 1.19 |
| NT2NV | 85.0 | 102.1 | 0.91 |

| LOG10 (A/MT) + B MB | LOG10 (A/M) + B MB |
|---|---|
| 5.21 | 5.10 |
| 5.51 | 5.24 |
| 5.43 | 5.51 |
| 5.67 | 5.63 |

4 29 SEP 76 3: 0: 0.0 0.0 NOVAYA ZEMLYA 73.5N 52.7E 3.1 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 54.7 | 192.4 | 0.85 |
| RK-CN | 54.4 | 158.3 | 0.44 |
| OB2NV | 69.7 | 39.1 | 0.84 |
| NT-NV | 69.7 | 46.5 | 0.53 |
| NT2NV | 69.7 | 71.8 | 0.48 |

| LOG10 (A/MT) + B MB | LOG10 (A/M) + B MB |
|---|---|
| 5.76 | 5.69 |
| 5.49 | 5.43 |
| 5.16 | 5.08 |
| 5.10 | 4.82 |
| 5.29 | 4.96 |

5 19 SEP 76 12:23:31.1 5.27 S.PANAMA 7.2N 82.4W 129.8 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 46.9 | 95.2 | 0.71 |
| RK-CN | 44.7 | 262.7 | 1.01 |
| OB2NV | 43.0 | 186.0 | 1.45 |
| NT-NV | 43.0 | 477.3 | 1.03 |
| NT2NV | 43.0 | 449.2 | 0.96 |

| LOG10 (A/MT) + B MB | LOG10 (A/M) + B MB |
|---|---|
| 5.11 | 4.96 |
| 5.77 | 5.77 |
| 5.73 | 5.89 |
| 5.90 | 5.91 |
| 5.84 | 5.82 |

6 19 SEP 76 20:57:58.1 5.41 MEXICO 17.9N 100.6W 140.4 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 39.0 | 80.2 | 0.78 |
| RK-CN | 33.4 | 39.4 | 0.61 |
| OB2NV | 23.8 | 320.4 | 0.86 |
| NT-NV | 23.8 | 388.4 | 0.66 |
| NT2NV | 23.8 | 308.4 | 0.73 |

| LOG10 (A/MT) + B MB | LOG10 (A/M) + B MB |
|---|---|
| 4.96 | 4.86 |
| 4.83 | 4.61 |
| 5.45 | 5.38 |
| 5.44 | 5.26 |
| 5.37 | 5.24 |

7 2 SEP 76 10:20:17.6 5.12 EL SALVADOR 13.2N 89.9W 128.6 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 37.8 | 134.5 | 1.30 |
| RK-CN | 37.8 | 353.3 | 0.70 |
| OB2NV | 33.5 | 62.2 | 1.04 |
| NT-NV | 33.8 | 157.3 | 0.85 |

| LOG10 (A/MT) + B MB | LOG10 (A/M) + B MB |
|---|---|
| 5.44 | 5.55 |
| 5.62 | 5.46 |
| 5.22 | 5.24 |
| 5.54 | 5.47 |

8 6 SEP 76 9:56:23.2 4.97 N.ATLANTIC 58.1N 32.1W 39.3 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 24.6 | 138.5 | 0.70 |
| RK-CN | 35.2 | 65.4 | 0.75 |
| OB2NV | 56.0 | 17.9 | 1.06 |

| LOG10 (A/MT) + B MB | LOG10 (A/M) + B MB |
|---|---|
| 5.20 | 5.05 |
| 5.09 | 4.97 |
| 4.80 | 4.82 |

9 5 SEP 76 20:11:27.0 5.04 MEXICO 18.5N 101.1W 140.6 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 38.8 | 49.5 | 1.00 | 4.82 | 4.82 |
| RK-CN | 32.9 | 45.3 | 0.80 | 4.97 | 4.88 |
| OB2NV | 23.0 | 80.5 | 0.96 | 4.89 | 4.87 |

10 5 SEP 76 20:11:43.6 5.17 MEXICO 18.7N 100.7W 139.5 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 38.5 | 106.8 | 0.96 | 5.17 | 5.16 |
| RK-CN | 32.7 | 67.6 | 1.00 | 5.23 | 5.23 |
| OB2NV | 23.0 | 1052.0 | 1.14 | 6.12 | 6.18 |

11 9 SEP 76 9:27:46.0 5.05 SVALBARD 77.6N 8.0E 11.8 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 42.2 | 153.7 | 1.13 | 5.44 | 5.09 |
| RK-CN | 43.1 | 25.8 | 0.54 | 4.42 | 4.15 |
| OB2NV | 60.0 | 35.1 | 0.71 | 4.92 | 4.77 |

12 29 SEP 76 9:52:33.0 5.08 CUBA 19.3N 80.6W 109.9 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 33.1 | 135.3 | 0.70 | 5.40 | 5.25 |
| OB2NV | 35.6 | 120.1 | 0.86 | 5.36 | 5.30 |
| NT-NV | 35.9 | 171.6 | 0.69 | 5.38 | 5.16 |
| NT2NV | 35.8 | 237.1 | 0.86 | 5.64 | 5.55 |

13 25 SEP 76 21:47:20.6 5.13 EASTER IS. 26.4S 115.0W 179.9 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 79.5 | 147.2 | 0.85 | 5.56 | 5.40 |
| OB2NV | 63.6 | 32.6 | 1.28 | 5.36 | 5.46 |
| NT-NV | 63.6 | 19.8 | 1.50 | 5.23 | 5.31 |
| NT2NV | 63.6 | 69.3 | 0.94 | 5.48 | 5.45 |

14 26 SEP 76 6:35:49.3 4.55 KAMCHATKA 51.1N 157.2E 313.6 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 61.7 | 17.7 | 0.63 | 4.76 | 4.56 |
| OB2NV | 60.0 | 8.8 | 0.80 | 4.36 | 4.27 |
| NT2NV | 60.0 | 28.3 | 0.56 | 4.77 | 4.51 |

15 26 SEP 76 7:13:36.1 4.63 ARGENTINA 29.1S 64.6W 135.6 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 83.0 | 46.1 | 0.70 | 5.23 | 5.08 |
| OB2NV | 81.2 | 29.4 | 0.67 | 4.84 | 4.67 |
| NT-NV | 81.4 | 15.0 | 0.67 | 4.57 | 4.40 |
| NT2NV | 81.4 | 63.6 | 0.61 | 5.18 | 4.96 |

16 30 SEP 76 8: 4:10.9 5.21 CHILE-ARG BORDER 24.2S 68.2W 135.7 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 70.3 | 43.4 | 1.30 | 5.35 | 5.46 |
| RK-CN | 78.3 | 171.6 | 1.10 | 5.88 | 5.92 |
| OB2NV | 76.1 | 198.9 | 1.10 | 5.97 | 6.01 |
| NT-NV | 76.4 | 583.3 | 0.80 | 6.28 | 6.19 |
| NT2NV | 76.3 | 451.2 | 0.80 | 6.17 | 6.08 |

17 25 SEP 76 10:40:47.0 4.52 EASTER IS. 24.6S 106.8W 170.5 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 76.3 | 40.3 | 0.70 | 5.48 | 4.92 |
| OB2NV | 62.4 | 103.0 | 1.00 | 5.67 | 5.67 |
| NT-NV | 62.2 | 40.1 | 0.96 | 5.21 | 5.17 |
| NT2NV | 62.5 | 24.3 | 0.60 | 4.87 | 4.64 |

18 22 SEP 76 20: 7: 1.3 5.30 N.CHINA 39.9N 106.3E 328.7 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | | LOG10(A/M)+B MB |
|---|---|---|---|---|---|---|
| HN-ME | 93.8 | 19.5 | 0.90 | 5.09 | ** OMITTED ** | 5.05 |
| OB2NV | 93.6 | 11.5 | 0.60 | 4.73 | ** OMITTED ** | 4.51 |

19 22 SEP 76 2:30:30.8 4.78 ALEUTIANS 51.6N 175.9W 309.1 75.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 64.3 | 45.8 | 0.60 | 5.08 | 4.86 |
| RK-CN | 48.6 | 211.0 | 0.40 | 5.52 | 5.12 |
| OB2NV | 43.7 | 18.1 | 0.80 | 4.38 | 4.28 |
| NT-NV | 43.5 | 80.0 | 0.60 | 4.93 | 4.71 |
| NT2NV | 43.5 | 43.3 | 0.80 | 4.75 | 4.66 |

20 22 SEP 76 8:20:27.6 5.03 VOLCANO IS. 23.3N 142.1E 295.5 110.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | | LOG10(A/M)+B MB |
|---|---|---|---|---|---|---|
| RK-CN | 91.1 | 249.0 | 0.80 | 6.00 | ** OMITTED ** | 5.81 |
| OB2NV | 84.9 | 235.1 | 0.60 | 5.58 | | 5.36 |
| NT-NV | 84.6 | 505.6 | 0.60 | 5.91 | | 5.69 |
| NT2NV | 84.7 | 569.6 | 0.50 | 5.93 | | 5.63 |

21 4 OCT 76 6:59:19.5 4.62 C.MEXICO 20.0N 99.0W 134.1 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 30.7 | 35.1 | 0.80 | 4.83 | 4.74 |
| OB2NV | 22.3 | 42.7 | 1.50 | 4.86 | 5.04 |
| NT-NV | 22.5 | 140.4 | 1.10 | 5.17 | 5.21 |
| NT2NV | 22.6 | 105.7 | 1.00 | 4.99 | 4.99 |

22 4 OCT 76 23:36: 6.0 5.17 ECUADOR 0.2S 77.5W 127.1 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 47.1 | 73.0 | 1.50 | 5.65 | 5.82 |
| RK-CN | 52.8 | 36.3 | 0.70 | 4.83 | 4.68 |
| OB2NV | 51.6 | 11.6 | 1.10 | 4.54 | 4.58 |
| NT-NV | 51.9 | 51.1 | 0.40 | 4.90 | 4.60 |
| NT2NV | 51.8 | 42.9 | 0.50 | 4.82 | 4.52 |

23 7 OCT 76 22: 1:12.5 4.60 ECUADOR 0.8S 80.3W 130.5 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 52.9 | 21.9 | 0.80 | 4.66 | 4.56 |
| OB2NV | 50.4 | 22.6 | 0.50 | 4.55 | 4.25 |
| NT-NV | 50.6 | 230.2 | 0.30 | 5.69 | 5.17 |
| NT2NV | 50.5 | 110.6 | 0.30 | 5.37 | 4.85 |

24 8 OCT 76 9:22:46.6 4.55 KOMANDORSKY IS. 55.1N 164.3E 316.4 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 69.6 | 22.2 | 0.70 | 4.93 | 4.77 |
| RK-ON | 55.9 | 25.5 | 0.70 | 4.78 | 4.62 |
| OB2NV | 54.7 | 88.0 | 0.80 | 5.36 | 5.27 |
| NT-NV | 54.5 | 61.0 | 0.60 | 5.12 | 4.89 |
| NT2NV | 54.4 | 58.1 | 0.70 | 5.13 | 4.98 |

25 8 OCT 76 9:22:56.3 4.53 KOMANDORSKY IS. 55.1N 164.1E 316.4 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 69.6 | 36.0 | 0.50 | 5.16 | 4.85 |
| RK-ON | 56.0 | 25.8 | 0.70 | 4.78 | 4.63 |
| OB2NV | 54.8 | 102.0 | 0.90 | 5.47 | 5.42 |
| NT-NV | 54.6 | 87.0 | 0.80 | 5.36 | 5.26 |
| NT2NV | 54.5 | 75.4 | 0.70 | 5.25 | 5.09 |

26 8 OCT 76 14:38:27.9 4.78 KURILES 49.8N 155.7E 312.7 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 76.8 | 44.4 | 0.70 | 5.19 | 5.03 |
| RK-CN | 63.3 | 23.3 | 0.60 | 4.83 | 4.61 |
| OB2NV | 61.4 | 8.7 | 0.90 | 4.54 | 4.49 |
| NT2NV | 61.2 | 26.2 | 0.60 | 4.87 | 4.65 |

27 23 NOV 76 5: 3: 0.0 5.20 E. KAZAKH 50.0N 79.0E 350.4 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | | LOG10(A/M)+B MB |
|---|---|---|---|---|---|---|
| HN-ME | 79.9 | 241.4 | 0.80 | 5.76 | | 5.66 |
| RK-CN | 79.2 | 448.6 | 0.60 | 5.92 | | 5.62 |
| NT-NV | 91.9 | 109.6 | 0.70 | 5.71 | ** OMITTED ** | 5.56 |
| NT2NV | 91.9 | 78.5 | 0.90 | 5.66 | ** OMITTED ** | 5.61 |

28 9 OCT 76 12:31: 6.6 4.97 COSTA RICA 10.7N 85.8W 126.2 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 38.5 | 71.6 | 1.00 | 5.01 | 5.01 |
| RK-CN | 40.6 | 40.5 | 0.80 | 4.69 | 4.59 |
| OB2NV | 37.9 | 106.7 | 1.20 | 5.36 | 5.44 |
| NT-NV | 38.2 | 424.8 | 1.20 | 5.84 | 6.02 |
| NT2NV | 38.1 | 239.3 | 1.10 | 5.64 | 5.68 |

29 9 OCT 76 2:52:24.3 4.47 KURILES 45.1N 153.5E 308.8 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 81.7 | 9.2 | 0.70 | 4.47 | 4.32 |
| RK-CN | 67.0 | 23.0 | 0.70 | 4.93 | 4.78 |
| OB2NV | 64.9 | 37.2 | 0.90 | 5.23 | 5.19 |
| NT2NV | 64.7 | 52.9 | 0.70 | 5.29 | 5.13 |

30 9 OCT 76 16: 2:26.9 4.54 N.COLUMBIA 9.4N 77.5W 118.5 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| HN-ME | 37.7 | 35.8 | 0.70 | 4.69 | 4.54 |
| RK-CN | 43.6 | 31.8 | 0.70 | 4.57 | 4.42 |
| OB2NV | 44.5 | 9.6 | 0.80 | 4.20 | 4.10 |
| NT-NV | 44.8 | 73.0 | 0.60 | 5.05 | 4.83 |
| NT2NV | 44.7 | 25.1 | 0.70 | 4.61 | 4.45 |

31 9 OCT 76 19:41:27.1 4.31 S.PERU 15.2S 71.6W 132.6 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 68.8 | 21.8 | 0.50 | 4.83 | 4.53 |
| OB2NV | 67.0 | 18.2 | 0.60 | 4.79 | 4.57 |

32 9 OCT 76 21:10:24.1 4.53 PERU COAST 10.3S 79.5W 136.5 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 62.3 | 28.7 | 0.70 | 5.00 | 4.84 |
| OB2NV | 58.6 | 6.7 | 0.70 | 4.20 | 4.04 |

33 9 OCT 76 23:48: 9.0 4.39 C.AMER.-COAST 10.0N 91.0W 133.6 0.

| STA | DIST | AMP | T | LOG10(A/MT)+B MB | LOG10(A/M)+B MB |
|---|---|---|---|---|---|
| RK-CN | 40.9 | 15.7 | 0.70 | 4.26 | 4.10 |
| OB2NV | 35.4 | 7.0 | 0.80 | 4.12 | 4.03 |
| NT2NV | 35.6 | 18.6 | 0.60 | 4.44 | 4.22 |

34 10 OCT 76 2:58:56.6 4.91 KUPILES 45.4N 151.0E 310.0 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 82.2 | 57.1 | 0.90 |
| RK-ON | 68.7 | 37.5 | 1.00 |
| OB2NV | 66.3 | 14.4 | 1.00 |
| NT2NV | 66.1 | 18.6 | 0.50 |

LOG10(A/MT) + B

| MB |
|---|
| 5.36 |
| 5.28 |
| 4.86 |
| 4.76 |

LOG10(A/M) + B

| MB |
|---|
| 5.31 |
| 5.28 |
| 4.86 |
| 4.46 |

35 10 OCT 76 6:19:20.8 4.46 ECUADOR 0.4S 78.2W 128.0 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 52.9 | 38.1 | 0.70 |
| OB2NV | 51.4 | 5.4 | 1.10 |
| NT2NV | 51.5 | 19.4 | 0.60 |

LOG10(A/MT) + B

| MB |
|---|
| 4.85 |
| 4.20 |
| 4.52 |

LOG10(A/M) + B

| MB |
|---|
| 4.70 |
| 4.25 |
| 4.30 |

36 10 OCT 76 14:32: 4.9 4.59 KUPILES 43.2N 147.7E 309.3 45.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 71.9 | 19.2 | 0.50 |
| OB2NV | 69.4 | 11.4 | 0.90 |
| NT2NV | 69.3 | 15.6 | 0.50 |

LOG10(A/MT) + B

| MB |
|---|
| 4.54 |
| 4.52 |
| 4.46 |

LOG10(A/M) + B

| MB |
|---|
| 4.24 |
| 4.47 |
| 4.19 |

37 6 OCT 76 9:12:36.0 5.80 ECUADOR 0.6S 78.7W 128.7 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 47.7 | 212.2 | 2.00 |
| RK-ON | 53.0 | 131.2 | 1.30 |
| NT2NV | 51.4 | 226.1 | 1.20 |

LOG10(A/MT) + B

| MB |
|---|
| 6.28 |
| 5.71 |
| 5.89 |

LOG10(A/M) + B

| MB |
|---|
| 6.58 |
| 5.83 |
| 5.97 |

38 12 OCT 76 4:24:52.1 4.96 S. HONSHU, JAPAN 31.2N 141.5E 302.1 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 84.6 | 17.6 | 0.60 |
| OB2NV | 80.4 | 38.2 | 0.90 |
| NT-NV | 80.1 | 42.1 | 1.40 |
| NT2NV | 80.2 | 87.5 | 0.90 |

LOG10(A/MT) + B

| MB |
|---|
| 4.78 |
| 4.98 |
| 5.28 |
| 5.32 |

LOG10(A/M) + B

| MB |
|---|
| 4.56 |
| 4.98 |
| 5.43 |
| 5.28 |

39 12 OCT 76 23:49:24.3 4.41 W CST COLUMBIA 2.8N 77.5W 124.6 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 44.1 | 17.9 | 0.60 |
| RK-ON | 49.9 | 64.2 | 0.60 |
| OB2NV | 49.3 | 11.0 | 0.70 |

LOG10(A/MT) + B

| MB |
|---|
| 4.42 |
| 5.15 |
| 4.38 |

LOG10(A/M) + B

| MB |
|---|
| 4.20 |
| 4.82 |
| 4.23 |

40 13 OCT 76 17:35:45.1 4.68 VENEZUELA 10.5N 62.2W 104.4 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 47.8 | 58.6 | 0.60 |
| OB2NV | 55.1 | 15.2 | 0.80 |

LOG10(A/MT) + B

| MB |
|---|
| 5.20 |
| 4.69 |

LOG10(A/M) + B

| MB |
|---|
| 4.98 |
| 4.50 |

41 21 OCT 76 4:24:16.0 4.62 N. CHILE 22.1S 70.0W 135.8 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 68.2 | 21.0 | 0.70 |
| RK-ON | 75.8 | 36.2 | 0.60 |
| OB2NV | 73.6 | 29.8 | 1.00 |
| NT-NV | 73.9 | 68.0 | 0.80 |
| NT2NV | 73.6 | 39.9 | 1.00 |

LOG10(A/MT) + B

| MB |
|---|
| 4.96 |
| 4.97 |
| 5.03 |
| 5.26 |
| 5.14 |

LOG10(A/M) + B

| MB |
|---|
| 4.81 |
| 4.75 |
| 5.03 |
| 5.16 |
| 5.14 |

42 21 OCT 76 15:13:22.8 4.92 ALEUTIANS 52.3N 169.3W 309.9 53.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 44.8 | 16.8 | 0.40 |
| OB2NV | 39.6 | 62.0 | 0.70 |
| NT2NV | 39.5 | 69.8 | 1.00 |

LOG10(A/MT) + B

| MB |
|---|
| 4.29 |
| 4.89 |
| 5.07 |

LOG10(A/M) + B

| MB |
|---|
| 3.90 |
| 4.73 |
| 5.07 |

43 22 OCT 76 4: 4:22.6 4.64 CST OF NICARAGUA 12.1N 87.6W 126.9 70.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| HN-ME | 37.9 | 32.2 | 0.90 | 4.83 | 4.79 |
| RK-CN | 39.1 | 70.7 | 0.60 | 4.98 | 4.76 |
| OB2NV | 35.8 | 18.1 | 0.60 | 4.46 | 4.24 |
| NT-NV | 36.1 | 36.0 | 0.60 | 4.75 | 4.53 |
| NT2NV | 36.0 | 49.9 | 0.70 | 4.94 | 4.72 |

44 22 OCT 76 5:53:50.9 4.57 EL SALVADOR 13.2N 88.2W 126.4 79.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| RK-CN | 37.9 | 54.6 | 0.70 | 4.97 | 4.81 |
| OB2NV | 34.6 | 13.1 | 0.80 | 4.40 | 4.31 |
| NT-NV | 34.8 | 43.0 | 0.70 | 4.89 | 4.73 |
| NT2NV | 34.7 | 44.3 | 0.50 | 4.82 | 4.51 |

45 22 OCT 76 18:35:23.9 5.26 KODIAK REG 56.1N 153.3W 319.4 0.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| RK-CN | 34.8 | 118.7 | 0.50 | 5.27 | 4.97 |
| OB2NV | 31.2 | 80.1 | 1.30 | 5.50 | 5.61 |
| NT2NV | 31.0 | 192.3 | 1.20 | 5.82 | 5.90 |

46 24 OCT 76 17:19:55.5 4.69 CEN. ALASKA 63.0N 149.6W 332.8 70.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| HN-ME | 46.4 | 33.9 | 0.80 | 4.87 | 4.77 |
| OB2NV | 32.4 | 30.5 | 0.80 | 4.69 | 4.59 |

47 26 OCT 76 5:59:56.4 5.34 KURILE IS 46.1N 150.9E 310.7 130.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| HN-ME | 81.6 | 89.6 | 0.60 | 5.17 | 4.95 |
| RK-CN | 58.3 | 105.3 | 0.80 | 5.21 | 5.11 |
| OB2NV | 66.1 | 27.6 | 0.50 | 4.57 | 4.27 |
| NT-NV | 65.8 | 270.1 | 0.60 | 5.60 | 5.38 |
| NT2NV | 65.9 | 385.0 | 0.60 | 5.76 | 5.53 |

48 28 OCT 76 9:59:21.3 4.55 PERU 14.6S 73.7W 134.0 0.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| RK-CN | 67.8 | 26.7 | 0.70 | 5.00 | 4.84 |
| OB2NV | 65.4 | 9.7 | 0.70 | 4.56 | 4.40 |

49 2 NOV 76 19:23: 2.7 4.90 KURILE IS 47.0N 151.0E 311.5 0.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| HN-ME | 80.8 | 126.4 | 0.70 | 5.52 | 5.37 |
| OB2NV | 78.2 | 22.5 | 0.90 | 4.89 | 4.85 |
| NT2NV | 78.1 | 25.9 | 0.80 | 4.92 | 4.82 |

50 12 NOV 76 14:47:32.7 5.39 BAFFIN BAY 72.0N 70.0W 19.5 89.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| HN-ME | 26.1 | 171.6 | 0.70 | 5.10 | 5.03 |
| NT-NV | 41.8 | 181.1 | 0.70 | 5.42 | 5.26 |
| NT2NV | 41.8 | 138.1 | 0.60 | 5.26 | 5.04 |

51 15 NOV 76 14:14:26.6 4.60 KURILES 45.0N 148.0E 310.8 200.

| STA | DIST | AMP | T | LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|---|---|---|---|
| HN-ME | 83.0 | 43.1 | 0.50 | 4.70 | 4.49 |
| NT2NV | 67.8 | 35.0 | 0.60 | 4.57 | 4.35 |

52 17 NOV 76 5:33:35.5 5.50 KURILES 51.0N 156.0E 313.9 100.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 75.6 | 408.9 | 0.70 |
| NT2NV | 60.5 | 424.2 | 0.70 |

LOG10(A/MT) + B: MB 5.85, 6.05

LOG10(A/M) + B: MB 5.70, 5.89

53 22 NOV 76 20: 9: 2.7 4.50 VENEZUELA 7.0N 72.0W 115.6 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 47.3 | 120.5 | 0.60 |
| NT-NV | 55.0 | 35.2 | 0.40 |

LOG10(A/MT) + B: MB 5.47, 4.84

LOG10(A/M) + B: MB 5.17, 4.44

54 26 NOV 76 23:43:12.6 4.80 PERU-ECUADOR BDR 2.0S 77.0W 128.1 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 49.2 | 41.7 | 0.80 |
| RK-CN | 55.2 | 80.0 | 0.50 |
| NT-NV | 54.1 | 269.9 | 0.60 |
| NT2NV | 54.0 | 175.3 | 0.80 |

LOG10(A/MT) + B: MB 5.26, 5.20, 5.76, 5.66

LOG10(A/M) + B: MB 4.97, 4.90, 5.54, 5.57

55 1 DEC 76 14:15:33.2 5.00 COSTA RICA 10.0N 85.0W 125.9 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 39.0 | 213.1 | 1.30 |
| RK-CN | 41.6 | 83.7 | 1.10 |
| NT2NV | 39.5 | 320.8 | 1.00 |

LOG10(A/MT) + B: MB 5.54, 5.19, 5.69

LOG10(A/M) + B: MB 5.65, 5.24, 5.61

56 1 DEC 76 17:44:33.8 4.50 CST OF CENT. AMER. 12.0N 90.0W 130.1 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 38.7 | 46.5 | 0.70 |
| NT2NV | 34.4 | 129.7 | 0.60 |

LOG10(A/MT) + B: MB 4.67, 5.34

LOG10(A/M) + B: MB 4.61, 5.12

57 3 DEC 76 5:27:34.4 4.90 CHILE-BOLIVIA 21.0S 69.0W 134.3 70.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 74.7 | 145.2 | 0.70 |
| NT2NV | 73.1 | 216.5 | 1.00 |

LOG10(A/MT) + B: MB 5.37, 5.70

LOG10(A/M) + B: MB 5.22, 5.77

58 3 DEC 76 23:10:23.1 4.60 N. CHILE 22.0S 69.0W 134.9 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 76.5 | 80.0 | 0.80 |
| NT2NV | 73.1 | 60.1 | 0.70 |

LOG10(A/MT) + B: MB 5.42, 5.24

LOG10(A/M) + B: MB 5.32, 5.08

59 30 NOV 76 0:40:57.0 6.30 CHILE-BOLIVIA 21.0S 69.0W 134.3 63.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 66.6 | 1102.7 | 0.60 |
| RK-CN | 74.5 | 4001.4 | 0.60 |
| NT2NV | 72.9 | 1804.5 | 1.00 |

LOG10(A/MT) + B: MB 6.50, 5.91, 6.67

LOG10(A/M) + B: MB 6.28, 5.88, 6.67

60 4 DEC 76 5: 6:29.7 4.70 N. CHILE 21.0S 69.0W 134.3 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 74.8 | 58.5 | 0.51 |
| OB2NV | 72.9 | 62.9 | 0.80 |
| NT-NV | 73.1 | 104.7 | 0.80 |
| NT2NV | 73.0 | 75.2 | 0.80 |

LOG10(A/MT) + B: MB 5.46, 5.31, 5.53, 5.39

LOG10(A/M) + B: MB 4.77, 5.21, 5.43, 5.30

61 4 DEC 76 12:32:35.4 5.20 N. CHILE 20.0S 69.0W 133.7 103.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 66.6 | 80.7 | 1.30 |
| RK-CN | 74.5 | 94.1 | 0.60 |
| NT-NV | 72.9 | 454.2 | 0.80 |
| NT2NV | 72.8 | 333.4 | 0.90 |

LOG10(A/MT) + B: MB 5.41, 5.17, 5.87, 5.78

LOG10(A/M) + B: MB 5.53, 4.88, 5.78, 5.74

62 5 DEC 76 22: 1:22.1 4.84

| STA | DIST | AMP | T |
|---|---|---|---|
| PK-CN | 87.8 | 182.4 | 0.60 |
| NT2NV | 83.1 | 296.7 | 0.70 |

BONIN IS

LOG10(A/MT) + B

| MB |
|---|
| 5.40 |
| 5.55 |

23.0N 140.0E 296.4 393.

LOG10(A/M) + B

| MB |
|---|
| 5.18 |
| 5.39 |

** OMITTED **

63 6 DEC 76 19:46: 2.4 4.90

| STA | DIST | AMP | T |
|---|---|---|---|
| PK-CN | 86.9 | 62.6 | 1.00 |
| NT2NV | 71.8 | 46.8 | 0.90 |

EASTER IS.

LOG10(A/MT) + B

| MB |
|---|
| 5.49 |
| 5.23 |

34.0S 112.0W 176.5 0.

LOG10(A/M) + B

| MB |
|---|
| 5.49 |
| 5.19 |

** OMITTED **

64 7 DEC 76 9:36:41.4 4.70

| STA | DIST | AMP | T |
|---|---|---|---|
| PK-CN | 84.3 | 25.1 | 0.80 |
| NT-NV | 81.2 | 163.4 | 1.00 |
| NT2NV | 81.5 | 387.4 | 0.80 |

S. HONSHU

LOG10(A/MT) + B

| MB |
|---|
| 4.58 |
| 5.45 |
| 5.75 |

34.0N 137.0E 386.7 360.

LOG10(A/M) + B

| MB |
|---|
| 4.48 |
| 5.45 |
| 5.65 |

65 9 DEC 76 4:24: 6.4 4.30

| STA | DIST | AMP | T |
|---|---|---|---|
| PK-CN | 37.2 | 270.3 | 0.70 |
| NT2NV | 33.3 | 29.1 | 0.70 |

EL SALVADOR

LOG10(A/MT) + B

| MB |
|---|
| 5.60 |
| 4.72 |

14.0N 90.0W 127.8 0.

LOG10(A/M) + B

| MB |
|---|
| 5.36 |
| 4.56 |

66 9 DEC 76 9:58:19.7 4.50

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 42.6 | 149.7 | 0.80 |
| PK-CN | 25.1 | 124.3 | 0.80 |
| NT2NV | 12.7 | 261.9 | 1.30 |

OFF OST OREGON

LOG10(A/MT) + B

| MB |
|---|
| 5.34 |
| 5.20 |
| 6.23 |

45.0N 130.0W 311.5 0.

LOG10(A/M) + B

| MB |
|---|
| 5.24 |
| 5.11 |
| 6.34 |

67 9 DEC 76 15:37:41.0 4.90

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 84.1 | 53.2 | 0.50 |
| PK-ON | 70.9 | 111.0 | 0.60 |
| NT2NV | 68.6 | 81.4 | 0.50 |

KURILES

LOG10(A/MT) + B

| MB |
|---|
| 5.13 |
| 5.22 |
| 5.66 |

44.0N 148.0E 369.9 85.

LOG10(A/M) + B

| MB |
|---|
| 4.83 |
| 5.00 |
| 4.76 |

68 20 OCT 76 8: 0: 0.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 54.6 | 59.5 | 0.70 |
| PK-CN | 54.4 | 256.1 | 0.40 |
| OB2NV | 69.7 | 6.1 | 0.60 |
| NT-NV | 69.7 | 58.0 | 0.40 |
| NT2NV | 69.7 | 11.9 | 0.50 |

NOVAYA ZEMLYA

LOG10(A/MT) + B

| MB |
|---|
| 5.21 |
| 5.78 |
| 4.25 |
| 5.19 |
| 4.50 |

73.0N 55.0E 2.8 0.

LOG10(A/M) + B

| MB |
|---|
| 5.06 |
| 5.30 |
| 4.02 |
| 4.76 |
| 4.20 |

69 19 DEC 76 14:37:30.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| PK-CN | 67.9 | 41.8 | 0.70 |
| NT2NV | 64.4 | 68.1 | 0.60 |

KURILES

LOG10(A/MT) + B

| MB |
|---|
| 5.19 |
| 5.36 |

45.0N 154.0E 368.5 0.

LOG10(A/M) + B

| MB |
|---|
| 5.04 |
| 5.14 |

70 20 DEC 76 16:18:58.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 30.6 | 169.4 | 1.40 |
| PK-ON | 46.5 | 228.1 | 1.30 |
| NT-NV | 48.2 | 147.1 | 0.90 |

COLUMBIA

LOG10(A/MT) + B

| MB |
|---|
| 5.47 |
| 6.10 |
| 5.71 |

7.0N 75.0W 118.4 0.

LOG10(A/M) + B

| MB |
|---|
| 5.62 |
| 6.22 |
| 5.66 |

71 15 DEC 76 12:26: 4.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 90.0 | 17.9 | 0.70 |
| NT-NV | 87.9 | 37.9 | 1.00 |
| NT2NV | 87.9 | 32.7 | 1.10 |

JAPAN

LOG10(A/MT) + B

| MB |
|---|
| 4.82 |
| 5.37 |
| 5.38 |

30.0N 131.0E 307.0 0.

LOG10(A/M) + B

| MB |
|---|
| ** OMITTED ** |
| ** OMITTED ** |
| ** OMITTED ** |
| 4.67 |
| 5.37 |
| 5.42 |

72 20 DEC 76 20:33:50.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 35.6 | 1160.9 | 1.55 |
| RK-CN | 18.6 | 3078.0 | 1.30 |
| OB2NV | 18.6 | 948.7 | 1.30 |
| NT-NV | 18.5 | 1933.5 | 1.40 |
| NT2NV | 18.5 | 1094.8 | 1.80 |

BR. COLUMBIA

LOG10(A/MT) + B

| MB |
|---|
| 6.50 |
| 6.34 |
| 5.83 |
| 6.19 |
| 6.12 |

55.0N 128.0W 345.6 0.

LOG10(A/M) + B

| MB |
|---|
| 6.60 |
| 6.46 |
| 5.95 |
| 6.33 |
| 6.38 |

73 20 DEC 76 21:22:25.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 36.0 | 63.0 | 1.00 |
| RK-CN | 19.0 | 395.4 | 0.90 |
| OB2NV | 19.0 | 79.1 | 1.30 |
| NT-NV | 19.0 | 271.7 | 1.20 |
| NT2NV | 19.0 | 142.3 | 1.40 |

BR. COLUMBIA

LOG10(A/MT) + B

| MB |
|---|
| 5.10 |
| 5.26 |
| 4.78 |
| 5.27 |
| 5.10 |

56.0N 128.0W 346.6 0.

LOG10(A/M) + B

| MB |
|---|
| 5.10 |
| 5.21 |
| 4.91 |
| 5.35 |
| 5.25 |

74 22 DEC 76 1: 1:42.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 91.0 | 368.6 | 1.00 |
| OB2NV | 90.0 | 242.1 | 1.10 |
| NT-NV | 85.0 | 377.5 | 1.10 |
| NT2NV | 85.0 | 594.1 | 1.00 |

VOLCANO IS

LOG10(A/MT) + B

| MB |
|---|
| 6.36 |
| 6.16 |
| 6.35 |
| 6.47 |

24.0N 142.0E 296.1 0.

LOG10(A/M) + B

| MB |
|---|
| ** OMITTED ** |
| ** OMITTED ** |
| 6.36 |
| 6.26 |
| 6.39 |
| 6.47 |

75 13 DEC 76 23: 1:28.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 82.4 | 63.7 | 0.60 |
| NT2NV | 77.3 | 111.3 | 0.60 |

N. PACIFIC

LOG10(A/MT) + B

| MB |
|---|
| 5.27 |
| 5.48 |

32.0N 145.0E 300.9 0.

LOG10(A/M) + B

| MB |
|---|
| 5.45 |
| 5.25 |

76 14 DEC 76 16: 6:56.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 89.5 | 220.0 | 0.80 |
| NT-NV | 87.7 | 472.0 | 1.60 |
| NT2NV | 87.8 | 423.9 | 1.50 |

JAPAN

LOG10(A/MT) + B

| MB |
|---|
| 5.96 |
| 6.79 |
| 6.71 |

31.0N 130.0E 308.3 0.

LOG10(A/M) + B

| MB |
|---|
| ** OMITTED ** |
| ** OMITTED ** |
| ** OMITTED ** |
| 5.86 |
| 7.00 |
| 6.88 |

77 27 DEC 76 18: 8: 8.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 74.0 | 34.4 | 0.60 |
| OB2NV | 55.0 | 19.0 | 0.60 |
| NT2NV | 56.0 | 28.8 | 0.60 |

JAPAN

LOG10(A/MT) + B

| MB |
|---|
| 4.87 |
| 4.61 |
| 4.79 |

42.0N 145.0E 309.3 0.

LOG10(A/M) + B

| MB |
|---|
| 4.64 |
| 4.39 |
| 4.57 |

78 30 DEC 76 3:57: 0.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 79.2 | 38.6 | 0.60 |
| OB2NV | 92.0 | 14.6 | 0.80 |
| NT-NV | 91.8 | 17.4 | 0.50 |

E. KAZAKH

LOG10(A/MT) + B

| MB |
|---|
| 4.80 |
| 4.88 |
| 4.83 |

50.0N 79.0E 350.4 0.

LOG10(A/M) + B

| MB |
|---|
| ** OMITTED ** |
| ** OMITTED ** |
| 4.67 |
| 4.79 |
| 4.53 |

79 31 DEC 76 9:16:37.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 86.9 | 52.0 | 1.00 |
| RK-CN | 75.7 | 45.9 | 0.70 |
| OB2NV | 72.9 | 25.1 | 1.00 |
| NT-NV | 72.6 | 17.0 | 0.60 |
| NT2NV | 72.7 | 27.1 | 0.70 |

JAPAN 40.0N 145.0E 307.6 0.

| LOG10(A/MT) + B MB | | LOG10(A/M) + B MB |
|---|---|---|
| 5.44 | ** OMITTED ** | 5.44 |
| 5.10 | | 4.95 |
| 5.00 | | 5.00 |
| 4.66 | | 4.44 |
| 4.90 | | 4.75 |

80 1 JAN 77 11:33:42.4 5.13

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 87.6 | 139.3 | 0.80 |
| OB2NV | 83.4 | 44.7 | 0.80 |
| NT-NV | 83.2 | 127.9 | 0.80 |
| NT2NV | 83.3 | 199.0 | 0.70 |

JAPAN 30.6N 137.2E 303.9 483.

| LOG10(A/MT) + B MB | | LOG10(A/M) + B MB |
|---|---|---|
| 5.28 | ** OMITTED ** | 5.18 |
| 4.64 | | 4.54 |
| 5.08 | | 4.98 |
| 5.23 | | 5.07 |

81 7 DEC 76 4:57: 0.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 79.9 | 267.9 | 0.90 |
| RK-CN | 79.2 | 582.8 | 0.40 |
| NT-NV | 91.9 | 100.0 | 0.80 |
| NT2NV | 91.9 | 116.6 | 0.70 |

E. KAZAKH 50.0N 79.0E 350.4 0.

| LOG10(A/MT) + B MB | | LOG10(A/M) + B MB |
|---|---|---|
| 5.82 | | 5.78 |
| 6.04 | ** OMITTED ** | 5.64 |
| 5.72 | ** OMITTED ** | 5.62 |
| 5.74 | | 5.58 |

82 5 JAN 77 10:37:33.6 4.76

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 86.5 | 31.4 | 0.80 |
| OB2NV | 82.3 | 5.9 | 1.00 |
| NT-NV | 82.0 | 12.5 | 0.70 |
| NT2NV | 82.1 | 22.9 | 1.30 |

VOLCANO IS 25.7N 142.5E 297.1 92.

| LOG10(A/MT) + B MB | | LOG10(A/M) + B MB |
|---|---|---|
| 4.88 | ** OMITTED ** | 4.78 |
| 4.13 | | 4.13 |
| 4.29 | | 4.14 |
| 4.89 | | 5.00 |

83 5 JAN 77 22:44:57.0 5.50

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 90.7 | 157.9 | 0.90 |
| OB2NV | 84.6 | 135.9 | 0.70 |
| NT-NV | 84.3 | 181.7 | 0.90 |
| NT2NV | 84.4 | 263.4 | 0.90 |

VOLCANO IS. 23.3N 143.8E 294.5 0.

| LOG10(A/MT) + B MB | | LOG10(A/M) + B MB |
|---|---|---|
| 5.93 | ** OMITTED ** | 5.88 |
| 5.70 | | 5.62 |
| 5.92 | | 5.87 |
| 6.08 | | 6.04 |

84 6 JAN 77 7:55:55.5 5.24

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 78.2 | 76.6 | 0.80 |
| RK-CN | 64.5 | 76.8 | 0.60 |
| OB2NV | 61.5 | 47.3 | 1.20 |
| NT-NV | 61.3 | 50.2 | 0.80 |
| NT2NV | 61.4 | 59.7 | 0.80 |

KURILES 49.3N 155.4E 312.3 0.

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 5.42 | 5.32 |
| 5.42 | 5.19 |
| 5.46 | 5.54 |
| 5.25 | 5.15 |
| 5.33 | 5.24 |

85 6 JAN 77 16: 2: 3.6 5.36

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 46.7 | 212.6 | 0.80 |
| OB2NV | 44.5 | 36.1 | 0.80 |
| NT-NV | 44.2 | 65.4 | 0.70 |
| NT2NV | 44.3 | 27.8 | 0.70 |

ANDREANOF IS. 51.3N 175.4W 308.6 0.

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 5.55 | 5.25 |
| 4.78 | 4.68 |
| 4.93 | 4.77 |
| 4.57 | 4.42 |

86 22 SEP 76 0:16: 9.3 6.05

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 83.3 | 675.0 | 0.70 |
| RK-CN | 70.0 | 1898.2 | 1.10 |
| OB2NV | 67.7 | 650.3 | 0.90 |
| NT-NV | 67.5 | 798.0 | 0.78 |
| NT2NV | 67.5 | 1036.5 | 0.70 |

KURILE IS. 44.8N 149.1E 310.2 55.

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 6.30 | 6.15 |
| 6.78 | 6.83 |
| 6.27 | 6.22 |
| 6.32 | 6.21 |
| 6.39 | 6.24 |

87 17 JAN 77 6:23:42.6 5.32 BONIN IS. 26.7N 142.6E 297.9 76.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 85.6 | 71.8 | 1.00 |
| OB2NV | 81.6 | 47.2 | 1.10 |
| NT-NV | 81.4 | 64.3 | 1.10 |
| NT2NV | 81.5 | 96.4 | 1.10 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 5.31 | 5.31 |
| 5.11 | 5.15 |
| 5.24 | 5.28 |
| 5.42 | 5.46 |

** OMITTED **

88 17 JAN 77 9:42:22.5 4.68 S. OF ALASKA 53.6N 158.7W 313.3 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 36.1 | 49.4 | 0.60 |
| OB2NV | 31.6 | 29.9 | 0.80 |
| NT-NV | 31.4 | 39.6 | 0.80 |
| NT2NV | 31.5 | 33.6 | 0.70 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 4.81 | 4.89 |
| 4.79 | 4.70 |
| 4.92 | 4.82 |
| 4.80 | 4.64 |

89 24 JAN 77 6:11:30.0 4.86 KURILE IS 45.5N 150.9E 310.1 84.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 79.8 | 48.1 | 0.70 |
| RK-ON | 66.4 | 67.1 | 0.70 |
| OB2NV | 64.5 | 15.9 | 0.90 |
| NT-NV | 64.3 | 13.4 | 0.60 |
| NT2NV | 64.4 | 22.6 | 0.70 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 4.94 | 4.79 |
| 5.14 | 4.99 |
| 4.61 | 4.66 |
| 4.41 | 4.18 |
| 4.67 | 4.52 |

90 3 FEB 77 21:30:59.0 0.0 RUSSIA-CHINA BDR 43.0N 130.0E 317.2 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 89.4 | 57.8 | 0.50 |
| RK-ON | 78.7 | 290.4 | 0.40 |
| OB2NV | 79.8 | 52.1 | 0.50 |
| NT2NV | 79.7 | 261.0 | 0.50 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 5.42 | 5.12 |
| 5.79 | 5.36 |
| 4.93 | 4.63 |
| 5.64 | 5.34 |

** OMITTED **

91 6 FEB 77 0:31:29.0 0.0 N. ATLANTIC 24.0N 48.0W 82.0 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 44.1 | 42.3 | 0.70 |
| OB2NV | 58.8 | 43.4 | 1.00 |
| NT2NV | 59.0 | 101.3 | 0.80 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 4.72 | 4.56 |
| 5.14 | 5.14 |
| 5.42 | 5.33 |

92 13 FEB 77 5:51:11.0 0.0 KAMCHATKA 52.0N 160.0E 313.8 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 73.5 | 120.4 | 0.60 |
| RK-ON | 59.9 | 139.4 | 0.60 |
| OB2NV | 58.1 | 81.3 | 0.70 |
| NT2NV | 57.9 | 187.6 | 0.80 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 5.58 | 5.35 |
| 5.47 | 5.25 |
| 5.28 | 5.13 |
| 5.69 | 5.59 |

93 16 FEB 77 0:50:18.0 0.0 N ATLANTIC OCEAN 32.0N 25.0W 63.1 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 36.0 | 34.5 | 0.70 |
| RK-ON | 53.0 | 85.9 | 0.90 |
| NT2NV | 72.0 | 16.4 | 0.70 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 4.78 | 4.62 |
| 5.30 | 5.25 |
| 4.69 | 4.53 |

94 16 FEB 77 1: 5:48.0 0.0 N PACIFIC OCEAN 38.0N 150.0E 303.6 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 75.1 | 20.5 | 0.50 |
| NT2NV | 70.6 | 13.4 | 0.40 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 4.61 | 4.31 |
| 4.52 | 4.12 |

95 17 FEB 77 13:32: 7.0 0.0 KOMANDORSKY IS. 56.0N 166.0E 317.1 C.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 54.6 | 94.6 | 1.00 |
| OB2NV | 53.5 | 7.1 | 1.20 |
| NT2NV | 53.3 | 31.9 | 0.80 |

| LOG10(A/MT) + B MB | LOG10(A/M) + B MB |
|---|---|
| 5.48 | 5.48 |
| 4.44 | 4.52 |
| 4.85 | 4.76 |

96 18 FEB 77 20:51:26.0 0.0 JAPAN 34.0N 142.0E 304.0 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 95.0 | 66.9 | 1.20 |
| RK-ON | 82.0 | 416.4 | 0.80 |
| OB2NV | 78.0 | 425.3 | 1.00 |
| NT2NV | 78.0 | 903.8 | 1.00 |

LOG10 (A/MT) + B
MB
5.80
6.14
6.23
6.56

** OMITTED **

LOG10 (A/M) + B
MB
5.88
6.04
6.23
6.56

97 19 FEB 77 0: 1:58.0 0.0 N PACIFIC OCEAN 31.0N 147.0E 299.0 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 82.3 | 21.0 | 0.80 |
| OB2NV | 76.7 | 24.1 | 1.20 |
| NT2NV | 76.5 | 494.0 | 1.00 |

LOG10 (A/MT) + B
MB
4.87
5.12
6.29

LOG10 (A/M) + B
MB
4.77
5.20
6.29

98 19 FEB 77 5:51: 1.0 0.0 KAMCHATKA 51.0N 156.0E 313.9 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 62.3 | 28.7 | 0.60 |
| OB2NV | 60.8 | 93.0 | 0.80 |
| NT2NV | 60.6 | 23.1 | 0.60 |

LOG10 (A/MT) + B
MB
4.96
5.47
4.75

LOG10 (A/M) + B
MB
4.74
5.37
4.53

99 19 FEB 77 22:33:55.0 0.0 ALEUTIANS 53.0N 173.0E 312.3 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 68.0 | 700.1 | 0.90 |
| RK-ON | 53.3 | 587.1 | 0.60 |
| OB2NV | 50.2 | 232.6 | 1.00 |
| NT2NV | 50.1 | 533.0 | 1.00 |

LOG10 (A/MT) + B
MB
6.53
6.53
5.77
6.13

LOG10 (A/M) + B
MB
6.48
6.81
5.77
6.13

100 19 FEB 77 22:47: 7.0 0.0 ALEUTIANS 49.0N 175.0E 306.9 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 54.8 | 91.6 | 0.60 |
| OB2NV | 49.5 | 21.1 | 0.50 |
| NT2NV | 49.7 | 48.5 | 0.70 |

LOG10 (A/MT) + B
MB
5.20
4.53
4.99

LOG10 (A/M) + B
MB
5.07
4.23
4.83

101 20 FEB 77 7: 2: 0.0 0.0 KODIAK IS. REG. 56.0N 152.0W 319.7 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 34.1 | 12.4 | 0.70 |
| OB2NV | 30.4 | 5.8 | 0.80 |

LOG10 (A/MT) + B
MB
4.36
4.02

LOG10 (A/M) + B
MB
4.21
3.93

102 20 FEB 77 8: 0:36.0 0.0 ALEUTIANS 51.0N 174.0E 309.6 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 54.1 | 192.0 | 0.70 |
| OB2NV | 50.0 | 6.4 | 0.50 |
| NT2NV | 49.9 | 16.2 | 0.70 |

LOG10 (A/MT) + B
MB
5.65
4.00
4.49

LOG10 (A/M) + B
MB
5.50
3.70
4.33

103 8 MAR 77 22:46:44.0 0.0 W. BRAZIL 8.0S 63.0W 120.6 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 54.3 | 160.5 | 1.30 |
| RK-ON | 64.5 | 290.7 | 1.00 |
| OB2NV | 67.0 | 70.6 | 1.00 |
| NT-NV | 67.3 | 163.3 | 1.30 |
| NT2NV | 67.2 | 115.9 | 1.20 |

LOG10 (A/MT) + B
MB
5.82
6.16
5.55
6.11
5.90

LOG10 (A/M) + B
MB
5.93
6.16
5.55
6.22
5.98

104 9 MAR 77 14:27: 5.0 0.0 N.E. CHINA BDR 42.0N 130.0E 316.4 0.

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 90.4 | 930.1 | 0.70 |
| RK-ON | 79.6 | 5374.3 | 0.80 |
| OB2NV | 80.5 | 2887.5 | 0.80 |

LOG10 (A/MT) + B
MB
6.65
7.09
5.83

** OMITTED **

LOG10 (A/M) + B
MB
6.49
6.99
6.73

105 12 MAR 77 2:58:55.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 42.6 | 115.0 | 1.00 |
| OB2NV | 60.3 | 177.9 | 1.20 |
| NT-NV | 60.6 | 294.7 | 0.80 |
| NT2NV | 60.5 | 236.0 | 1.10 |

N. ATLANTIC RIDGE 32.0N 41.0W 70.5 0.

LOG10 (A/MT) + B

| MB |
|---|
| 5.26 |
| 5.92 |
| 5.95 |
| 5.99 |

LOG10 (A/M) + B

| MB |
|---|
| 5.26 |
| 5.89 |
| 5.85 |
| 6.08 |

106 13 MAR 77 4:55:55.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 49.0 | 56.3 | 1.10 |
| RK-CN | 60.9 | 313.6 | 0.70 |
| OB2NV | 66.4 | 144.2 | 0.60 |
| NT-NV | 66.7 | 220.1 | 0.60 |
| NT2NV | 66.6 | 183.6 | 0.80 |

BRAZIL 2.0S 58.0W 112.2 0.

LOG10 (A/MT) + B

| MB |
|---|
| 5.29 |
| 5.96 |
| 5.69 |
| 5.97 |
| 5.88 |

LOG10 (A/M) + B

| MB |
|---|
| 5.33 |
| 5.80 |
| 5.47 |
| 5.65 |
| 5.78 |

107 13 MAR 77 21:15:17.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-MP | 45.3 | 57.7 | 0.90 |
| RK-CN | 55.8 | 119.8 | 0.80 |
| OB2NV | 60.0 | 152.3 | 0.80 |
| NT-NV | 60.3 | 314.1 | 1.00 |
| NT2NV | 60.2 | 300.2 | 0.90 |

VENEZUELA 1.0N 64.0W 114.3 0.

LOG10 (A/MT) + B

| MB |
|---|
| 5.17 |
| 5.50 |
| 5.60 |
| 6.03 |
| 5.96 |

LOG10 (A/M) + B

| MB |
|---|
| 5.13 |
| 5.46 |
| 5.50 |
| 6.03 |
| 5.99 |

108 15 MAR 77 21:28: 9.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 42.7 | 180.9 | 0.70 |
| OB2NV | 41.1 | 55.9 | 0.70 |
| NT-NV | 41.3 | 272.5 | 0.70 |
| NT2NV | 41.3 | 200.2 | 0.70 |

COSTA RICA 9.0N 83.0W 124.7 0.

LOG10 (A/MT) + B

| MB |
|---|
| 5.33 |
| 4.92 |
| 5.51 |
| 5.37 |

LOG10 (A/M) + B

| MB |
|---|
| 5.17 |
| 4.66 |
| 5.35 |
| 5.22 |

109 16 MAR 77 6:22:19.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 32.7 | 16.5 | 0.70 |
| OB2NV | 32.0 | 13.4 | 0.80 |
| NT-NV | 31.8 | 38.5 | 0.70 |
| NT2NV | 31.9 | 31.4 | 0.80 |

ALASKA PEN. 56.0N 155.0W 318.6 0.

LOG10 (A/MT) + B

| MB |
|---|
| 4.42 |
| 4.45 |
| 4.86 |
| 4.82 |

LOG10 (A/M) + B

| MB |
|---|
| 4.26 |
| 4.35 |
| 4.70 |
| 4.72 |

110 19 MAR 77 10:56: 6.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| HN-ME | 85.0 | 434.7 | 0.70 |
| RK-CN | 71.6 | 524.0 | 0.70 |
| OB2NV | 68.7 | 351.9 | 0.80 |
| NT-NV | 68.5 | 392.4 | 0.80 |
| NT2NV | 68.6 | 498.4 | 0.60 |

KURILES 43.0N 149.0E 308.5 0.

LOG10 (A/MT) + B

| MB |
|---|
| 6.28 |
| 6.19 |
| 6.16 |
| 6.21 |
| 6.23 |

LOG10 (A/M) + B

| MB |
|---|
| 6.42 |
| 6.03 |
| 6.07 |
| 6.12 |
| 6.01 |

111 4 MAR 77 19:21:40.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-CN | 71.7 | 1055.9 | 0.60 |
| OB2NV | 91.8 | 117.3 | 0.90 |
| NT-NV | 91.9 | 229.9 | 0.70 |
| NT2NV | 91.9 | 239.3 | 0.80 |

RUMANIA 44.0N 26.0E 26.4 0.

LOG10 (A/MT) + B

| MB |
|---|
| 6.45 |
| 5.74 |
| 6.03 |
| 6.10 |

** OMITTED **
** OMITTED **
** OMITTED **

LOG10 (A/M) + B

| MB |
|---|
| 6.23 |
| 5.68 |
| 5.88 |
| 6.00 |

112 7 MAR 77 0:29:11.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 83.1 | 51.3 | 0.30 |
| OB2NV | 87.8 | 7.7 | 0.70 |
| NT-NV | 87.6 | 39.0 | 0.50 |
| NT2NV | 87.6 | 53.8 | 1.20 |

N.E. CHINA 43.0N 118.0E 325.8 0.

LOG10 (A/MT) + B

| MB |
|---|
| 5.34 |
| 4.54 |
| 5.14 |
| 5.63 |

** OMITTED **
** OMITTED **
** OMITTED **

LOG10 (A/M) + B

| MB |
|---|
| 4.91 |
| 4.38 |
| 4.84 |
| 5.71 |

113 7 MAR 77 9:11:55.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 74.7 | 73.5 | 0.60 |
| OB2NV | 70.9 | 137.3 | 0.60 |
| NT-NV | 70.6 | 220.5 | 0.70 |
| NT2NV | 70.7 | 202.7 | 0.50 |

N. PACIFIC

LOG10 (A/MT) + B

| MB |
|---|
| 5.20 |
| 5.57 |
| 5.81 |
| 5.70 |

39.0N 149.0E 304.9 0.

LOG10 (A/M) + B

| MB |
|---|
| 4.97 |
| 5.35 |
| 5.66 |
| 5.40 |

114 21 MAR 77 4:36:38.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 90.9 | 9.1 | 0.70 |
| OB2NV | 84.4 | 22.3 | 1.00 |
| NT-NV | 84.1 | 13.8 | 0.80 |
| NT2NV | 84.2 | 41.6 | 1.00 |

VOICANO IS.

LOG10 (A/MT) + B

| MB |
|---|
| 4.62 |
| 5.25 |
| 4.76 |
| 5.32 |

23.4N 143.0E 294.7 0.

LOG10 (A/M) + B

| MB |
|---|
| 4.46 |
| 5.05 |
| 4.66 |
| 5.32 |

** OMITTED **

115 21 MAR 77 6:58:18.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 93.6 | 6.9 | 0.60 |
| OB2NV | 87.7 | 29.3 | 1.00 |
| NT-NV | 86.8 | 52.7 | 0.80 |
| NT2NV | 86.9 | 55.4 | 0.80 |

MARIANA IS.

LOG10 (A/MT) + B

| MB |
|---|
| 4.51 |
| 5.18 |
| 5.32 |
| 5.42 |

21.0N 141.0E 294.3 0.

LOG10 (A/M) + B

| MB |
|---|
| 4.20 |
| 5.19 |
| 5.22 |
| 5.33 |

** OMITTED **
** OMITTED **
** OMITTED **
** OMITTED **

116 23 MAR 77 2:11:25.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 44.7 | 2174.6 | 0.50 |
| OB2NV | 49.6 | 274.5 | 0.60 |
| NT-NV | 49.9 | 665.9 | 0.70 |
| NT2NV | 49.8 | 676.5 | 0.60 |

CST. VENEZUELA

LOG10 (A/MT) + B

| MB |
|---|
| 6.47 |
| 5.71 |
| 6.10 |
| 6.08 |

11.0N 69.0W 109.2 0.

LOG10 (A/M) + B

| MB |
|---|
| 6.17 |
| 5.49 |
| 5.95 |
| 5.86 |

117 23 MAR 77 3:46:10.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 71.6 | 21.7 | 0.70 |
| OB2NV | 70.1 | 12.7 | 0.80 |
| NT-NV | 69.8 | 31.2 | 0.70 |
| NT2NV | 69.9 | 12.7 | 0.50 |

HOKKAIDO

LOG10 (A/MT) + B

| MB |
|---|
| 4.81 |
| 4.62 |
| 4.98 |
| 4.51 |

45.0N 145.0E 312.0 0.

LOG10 (A/M) + B

| MB |
|---|
| 4.65 |
| 4.53 |
| 4.83 |
| 4.21 |

118 26 MAR 77 4:36:10.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 44.3 | 167.5 | 0.90 |
| OB2NV | 38.8 | 195.9 | 1.00 |
| NT-NV | 38.6 | 239.6 | 1.10 |
| NT2NV | 38.7 | 216.7 | 1.10 |

FOX IS.

LOG10 (A/MT) + B

| MB |
|---|
| 5.45 |
| 5.41 |
| 5.59 |
| 5.54 |

52.0N 168.0W 309.5 0.

LOG10 (A/M) + B

| MB |
|---|
| 5.40 |
| 5.41 |
| 5.63 |
| 5.58 |

119 29 MAR 77 3:57: 0.0 0.0

| STA | DIST | AMP | T |
|---|---|---|---|
| RK-ON | 78.9 | 76.4 | 0.40 |
| OB2NV | 91.9 | 33.7 | 0.70 |
| NT-NV | 91.8 | 45.6 | 0.60 |

E. KAZAKH

LOG10 (A/MT) + B

| MB |
|---|
| 5.19 |
| 5.20 |
| 5.29 |

50.0N 78.0E 351.0 0.

LOG10 (A/M) + B

| MB |
|---|
| 4.79 |
| 5.14 |
| 5.07 |

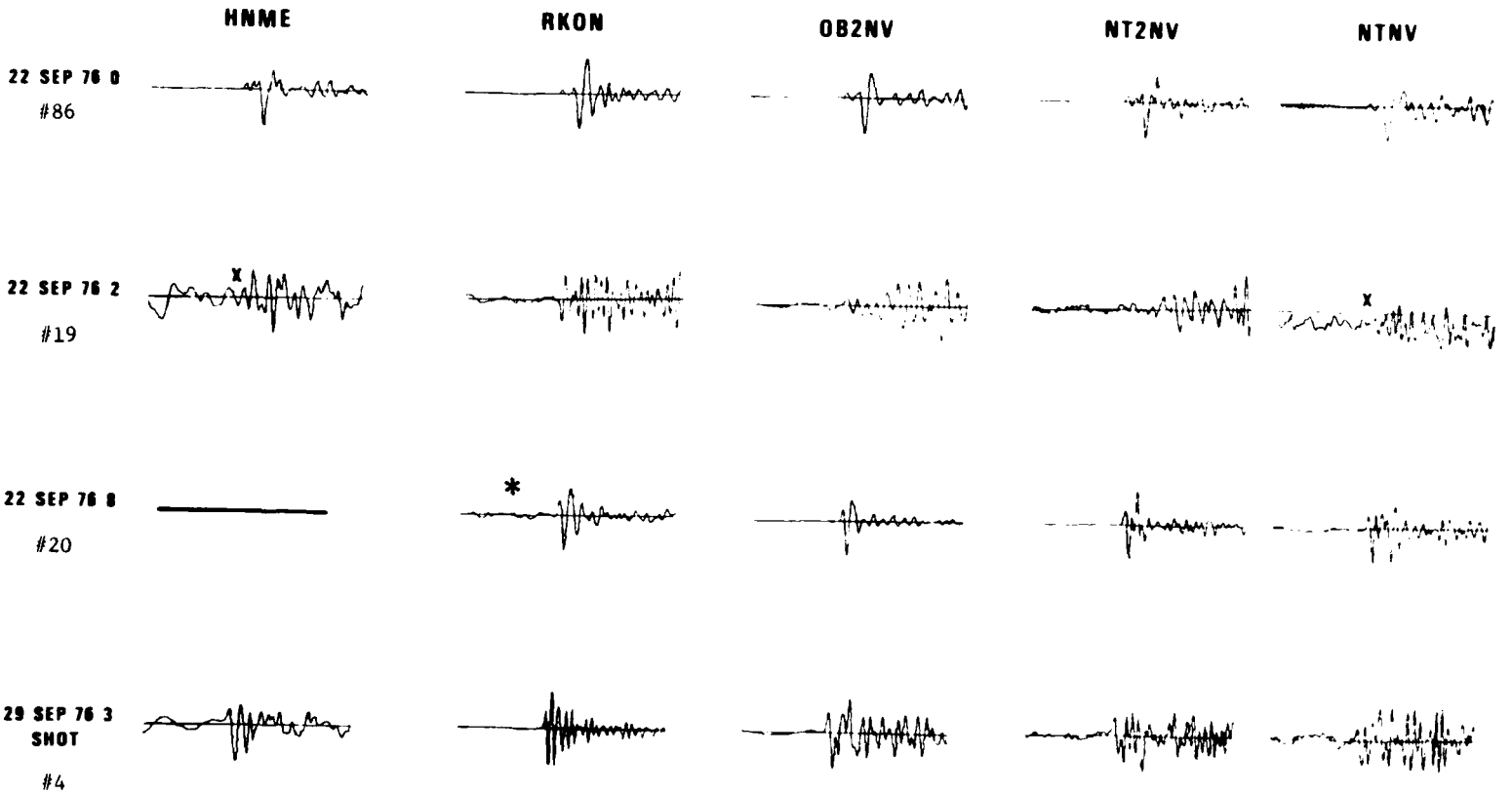
** OMITTED **
** OMITTED **

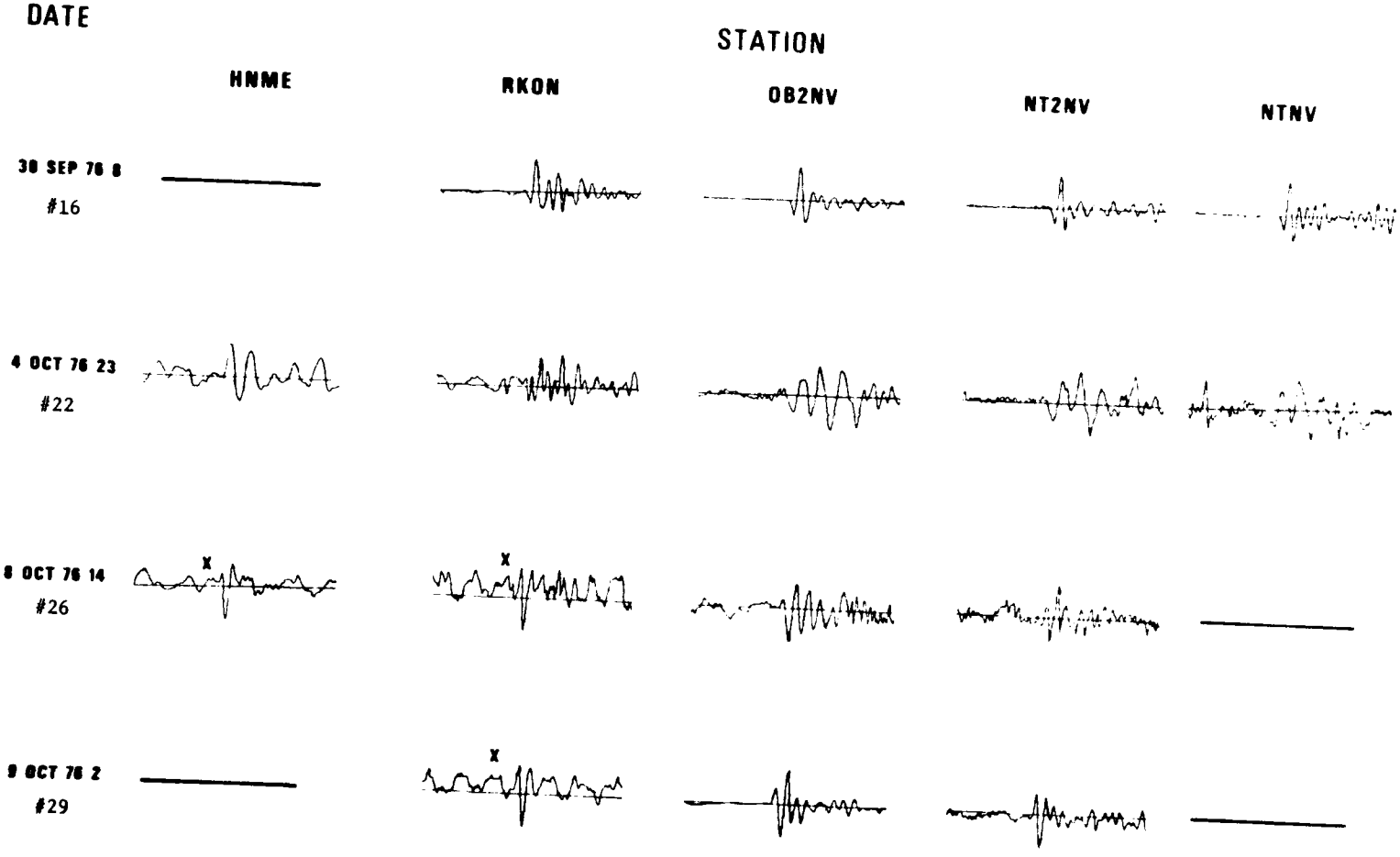
# APPENDIX B

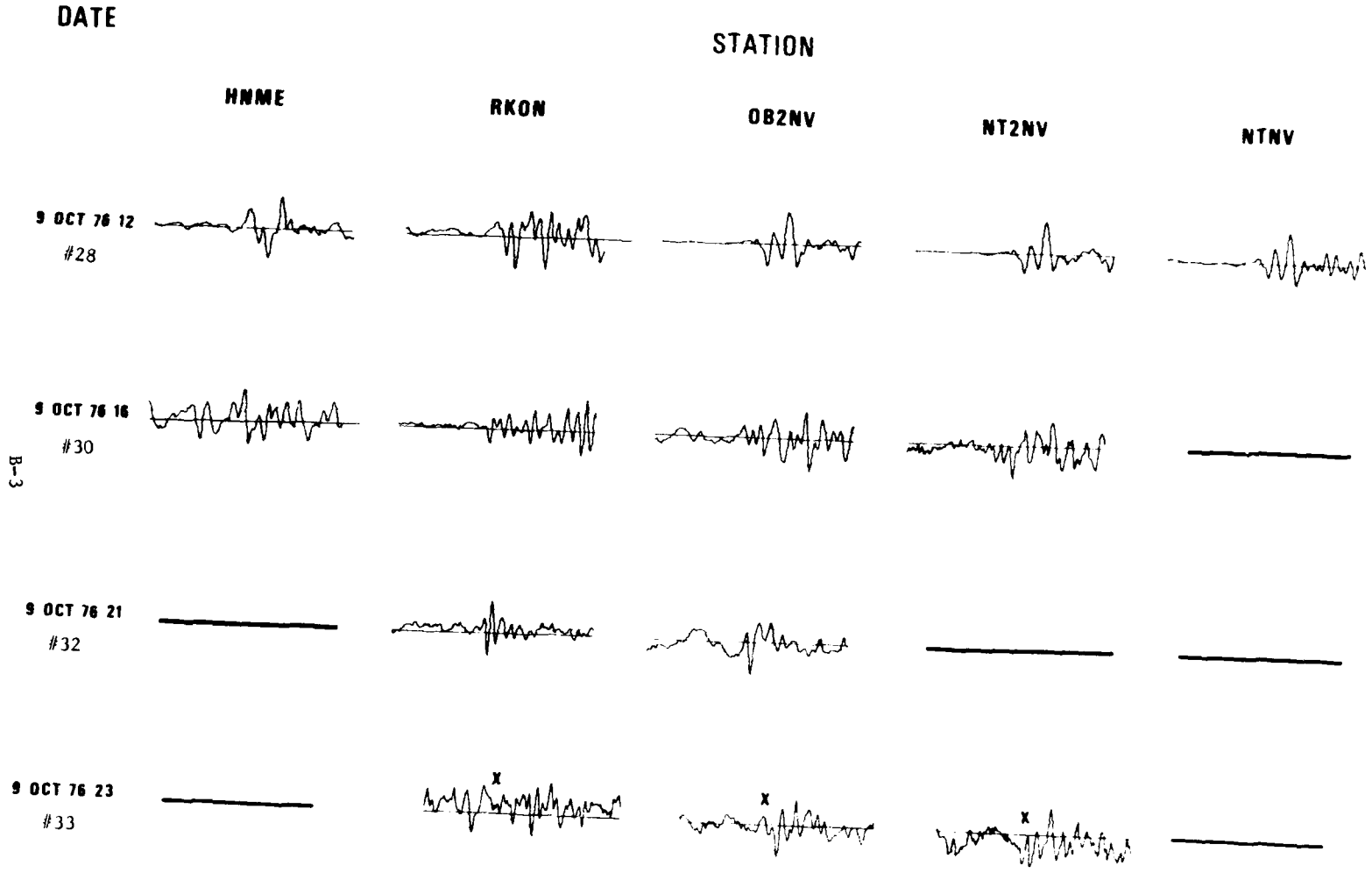
Vertical short period waveforms of all events digitized for the computation of $\Delta t^*$

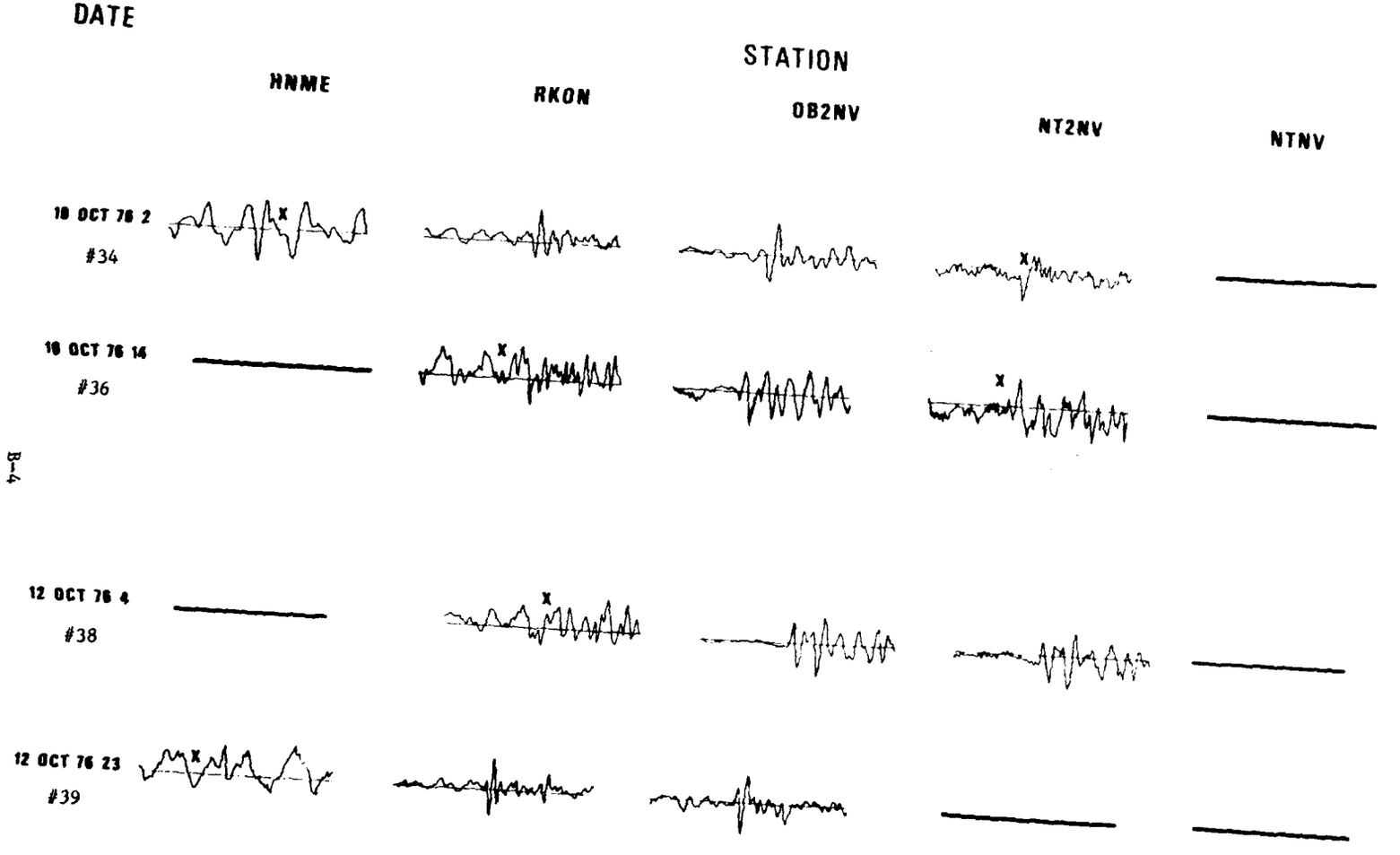
DATE

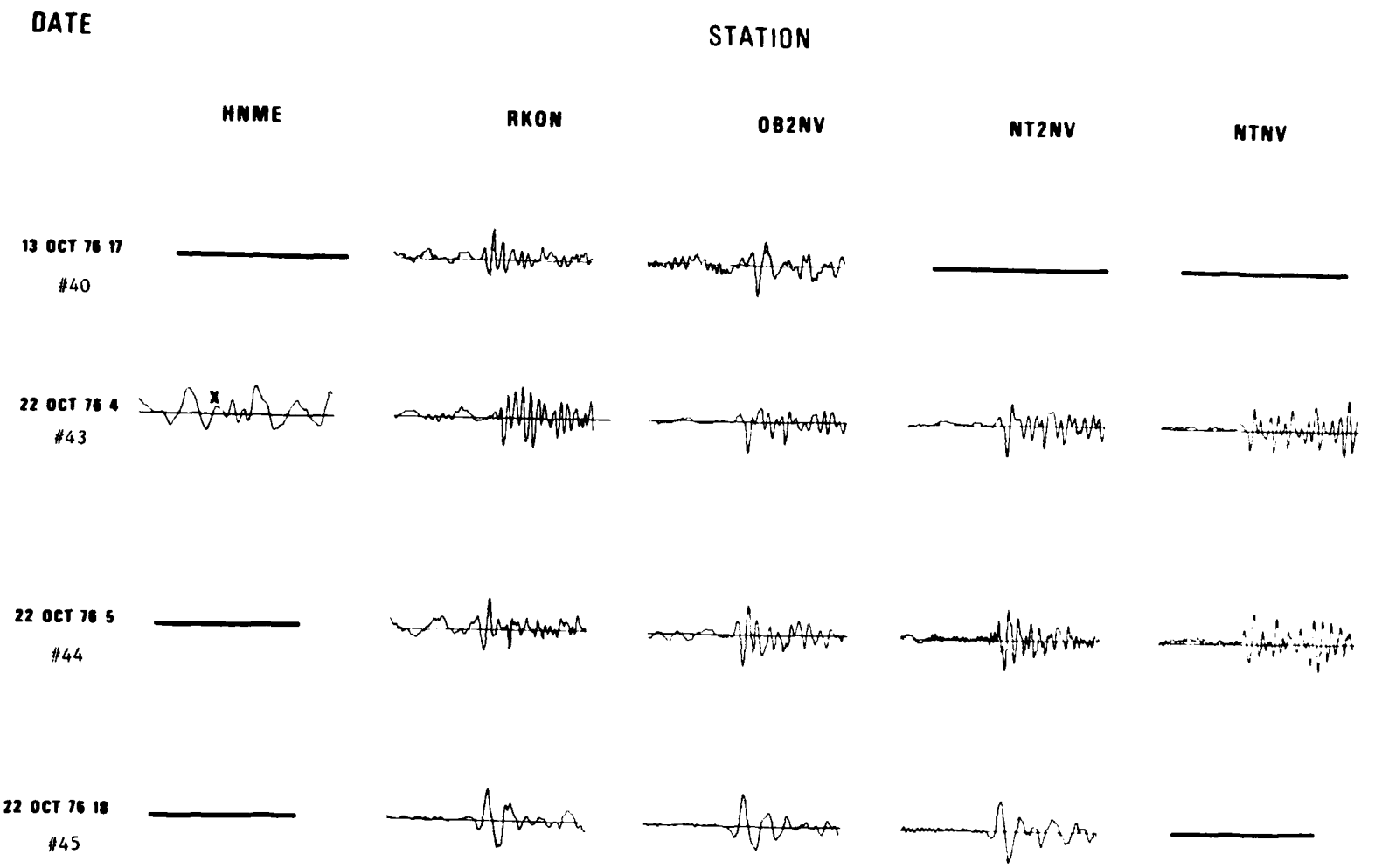
STATION

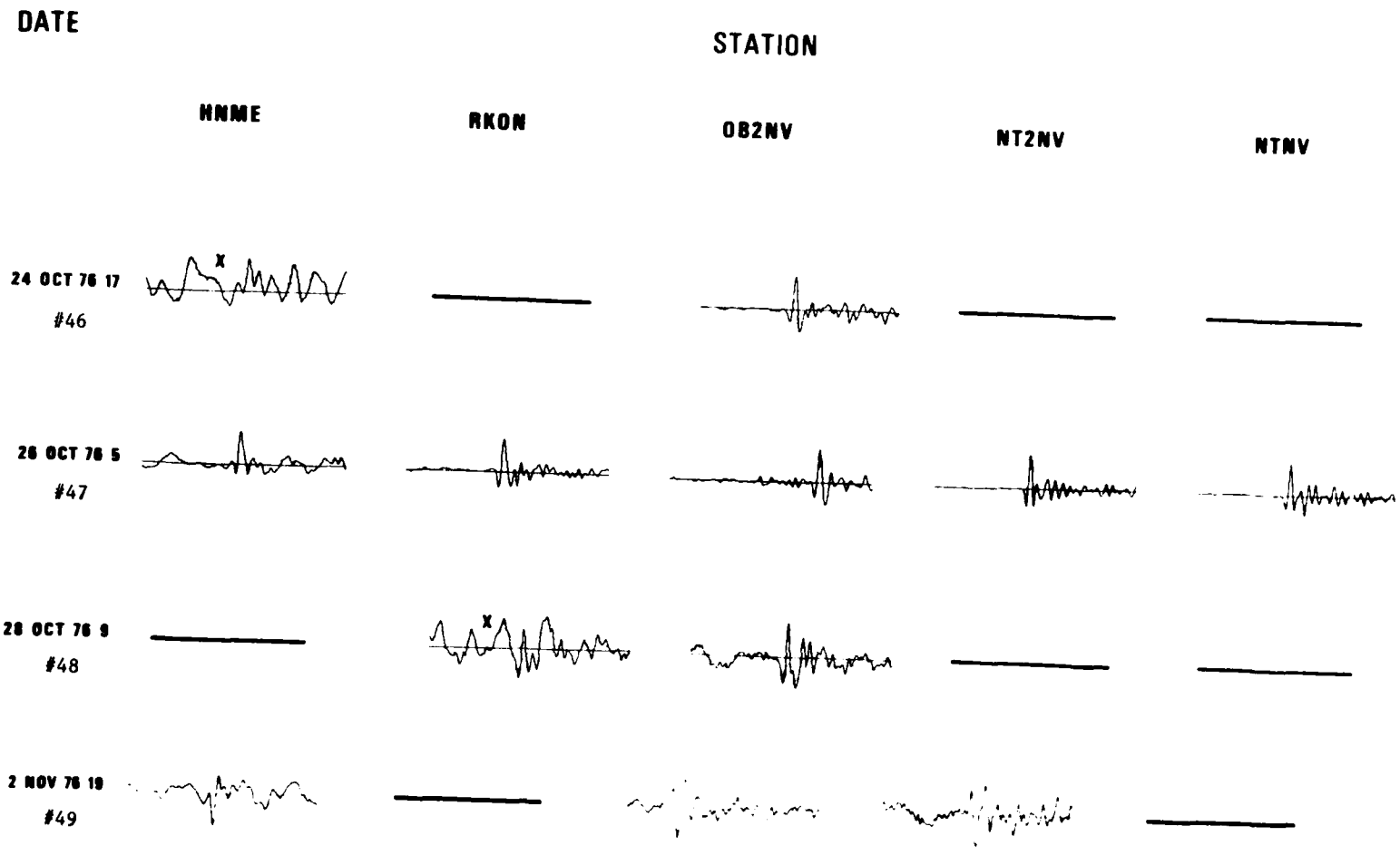


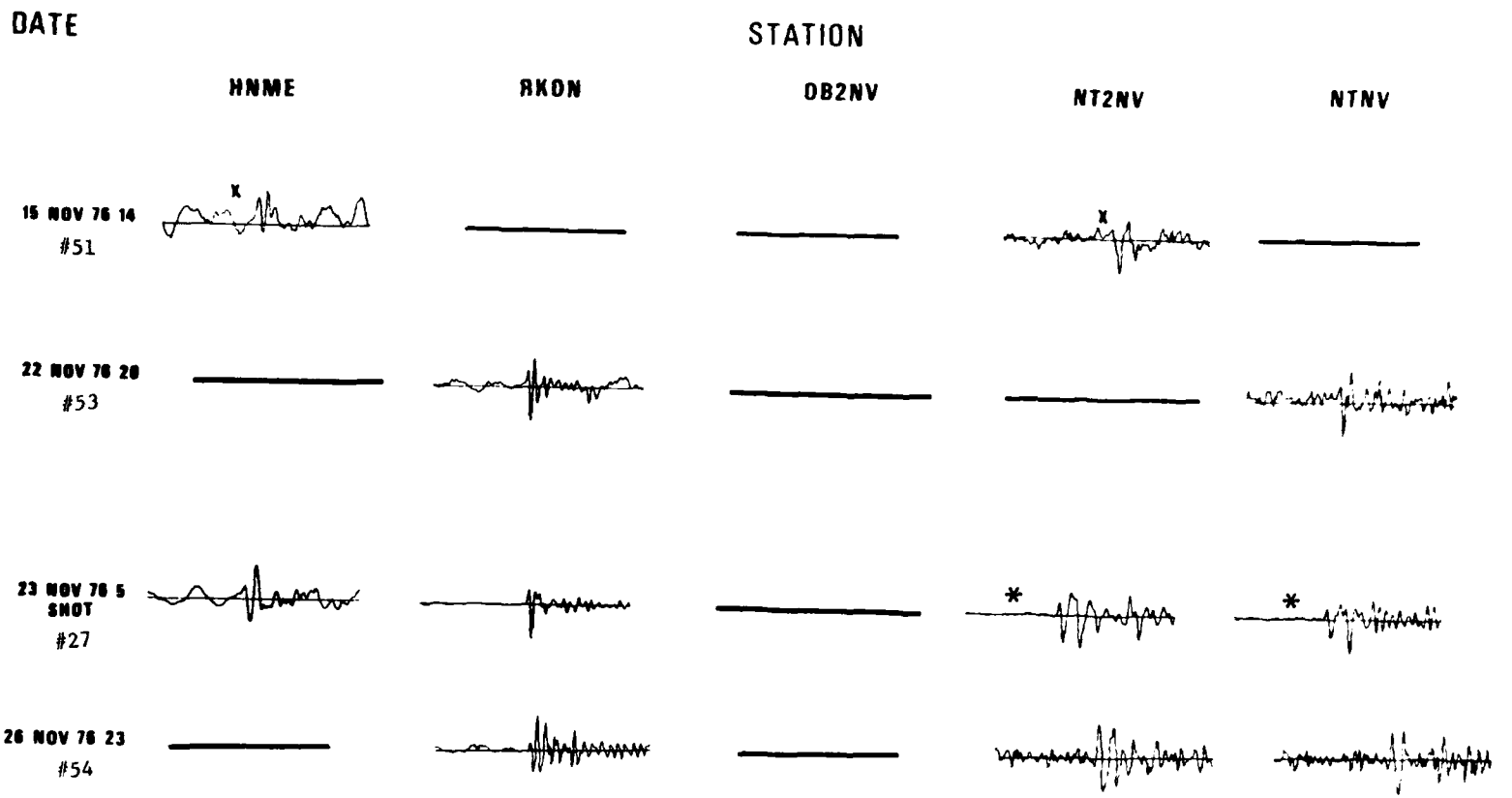

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
30 SEP 76 8
#16
4 OCT 76 23
#22
8 OCT 76 14
#26
9 OCT 76 2
#29

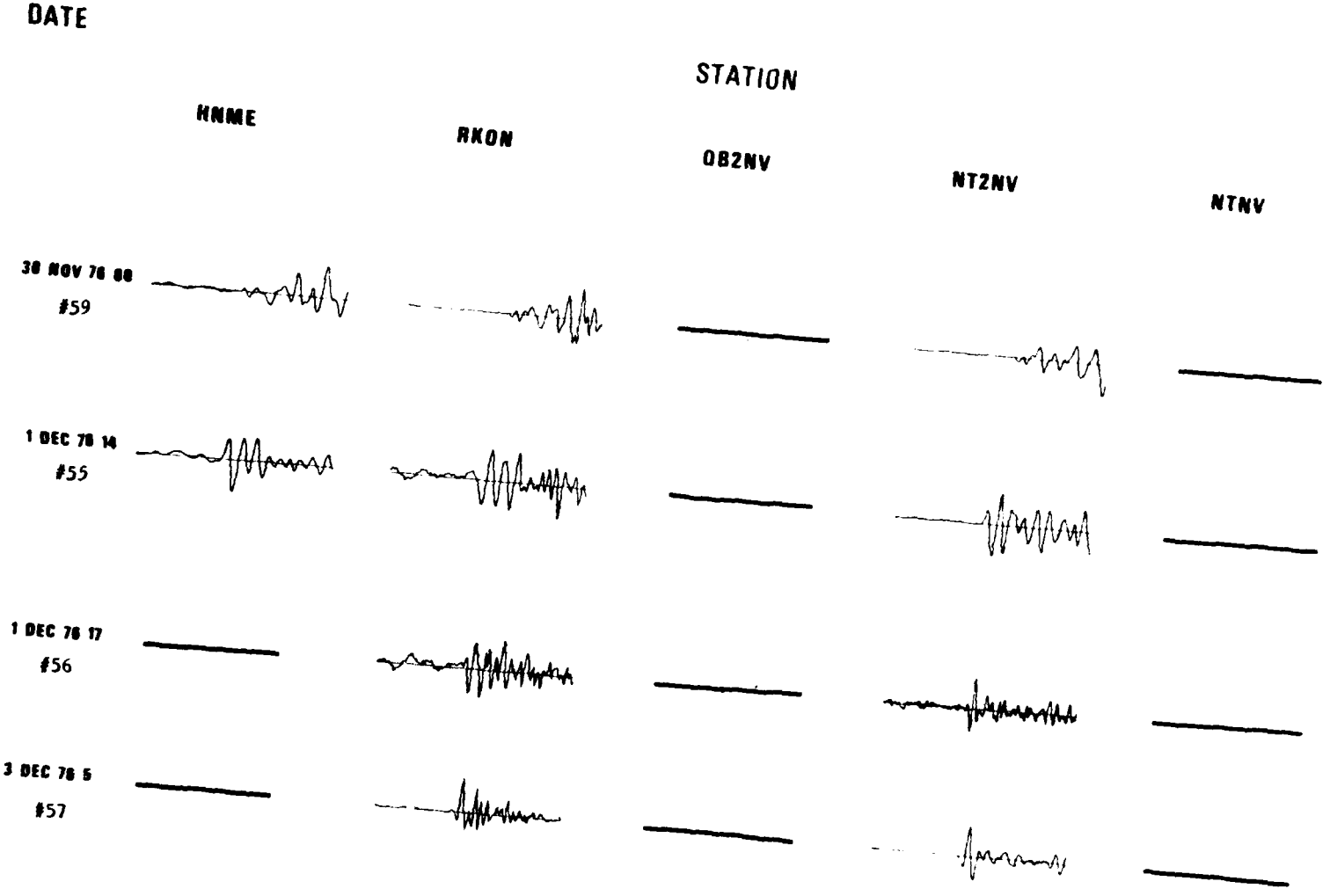

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
9 OCT 76 12
#28
9 OCT 76 16
#30
9 OCT 76 21
#32
9 OCT 76 23
#33
X
X
X

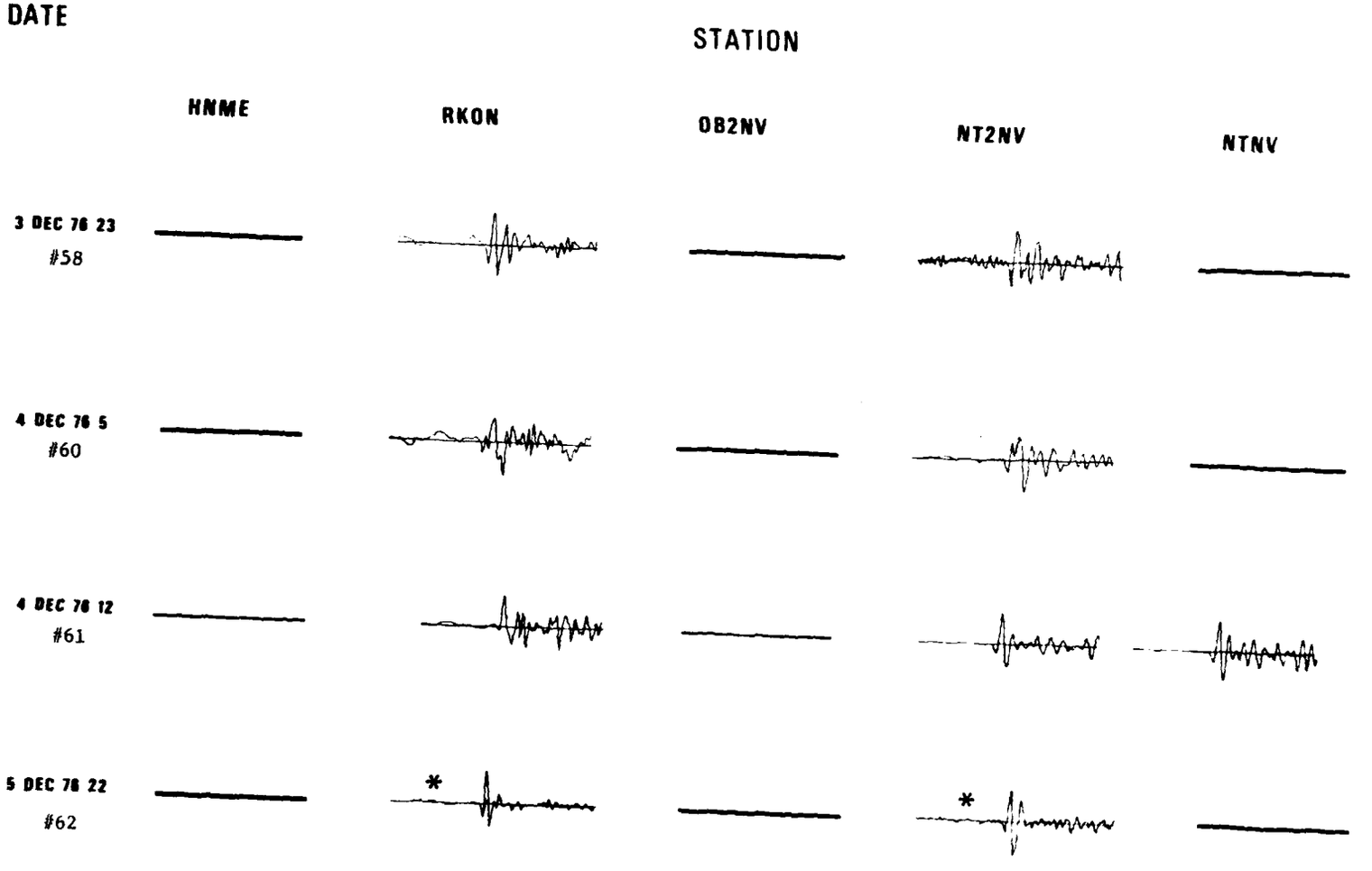

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
18 OCT 76 2
#34
18 OCT 76 14
#36
12 OCT 76 4
#38
12 OCT 76 23
#39

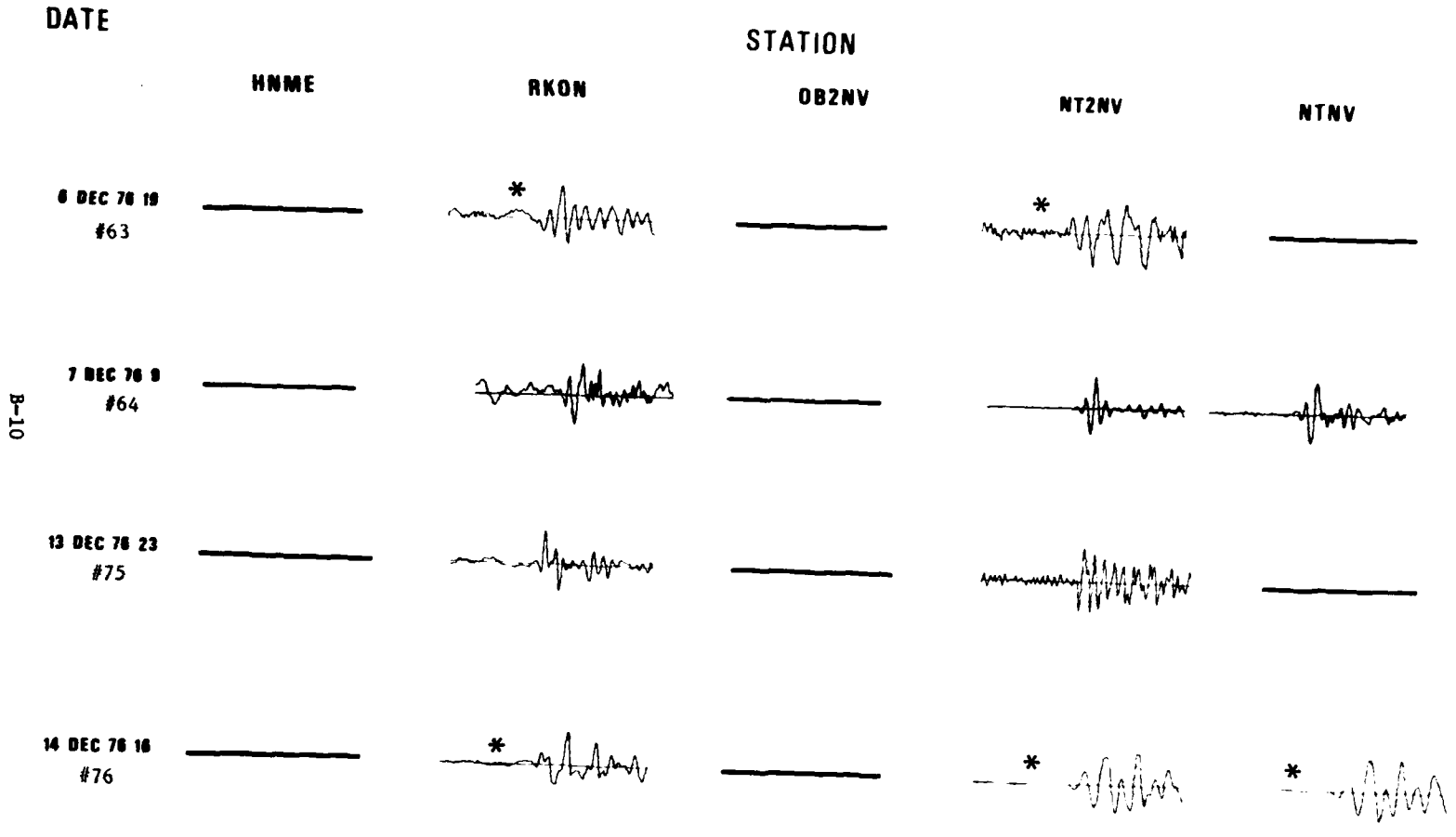

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
13 OCT 76 17
#40
22 OCT 76 4
#43
22 OCT 76 5
#44
22 OCT 76 18
#45

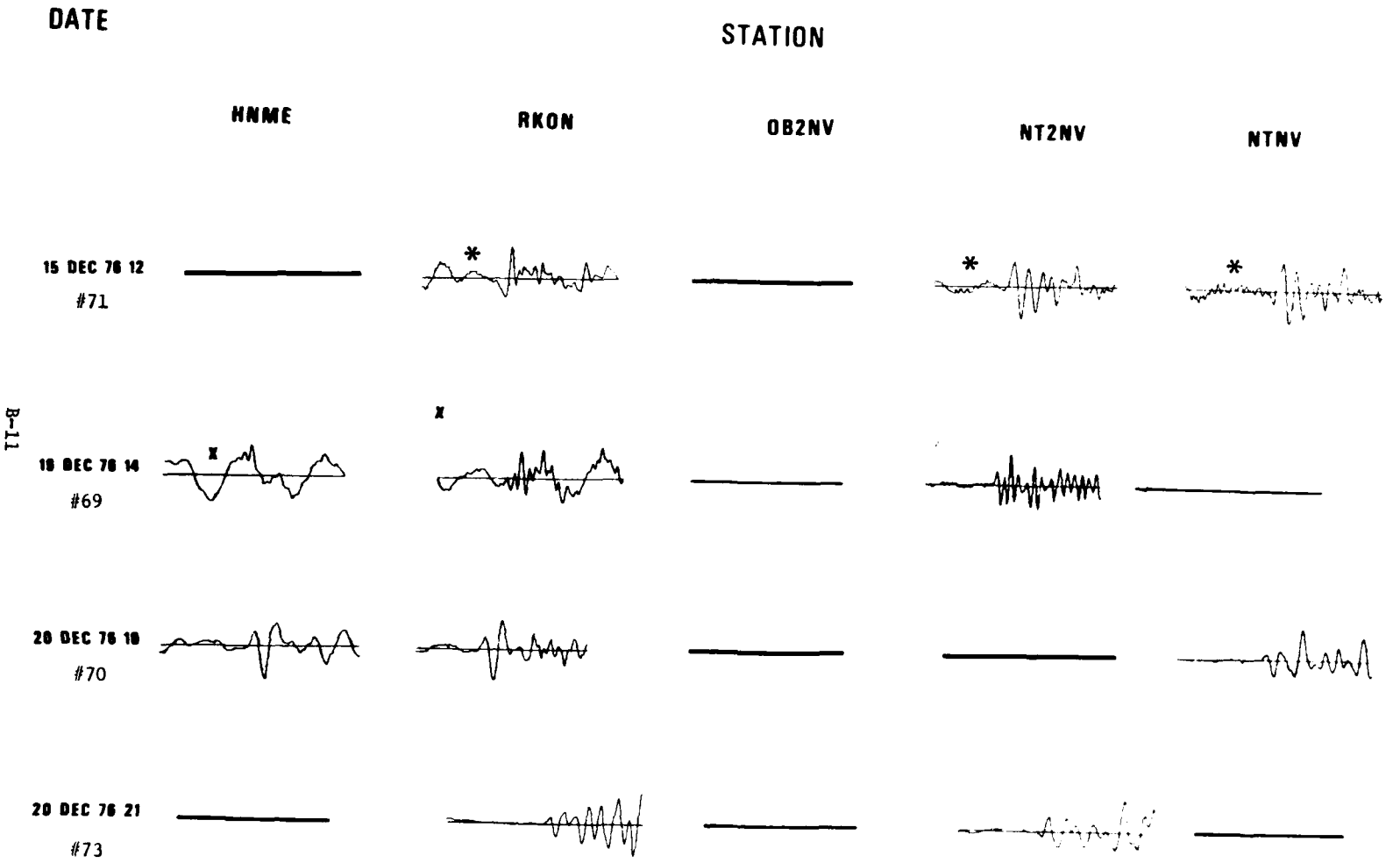

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
24 OCT 76 17
#46
26 OCT 76 5
#47
28 OCT 76 9
#48
2 NOV 76 19
#49

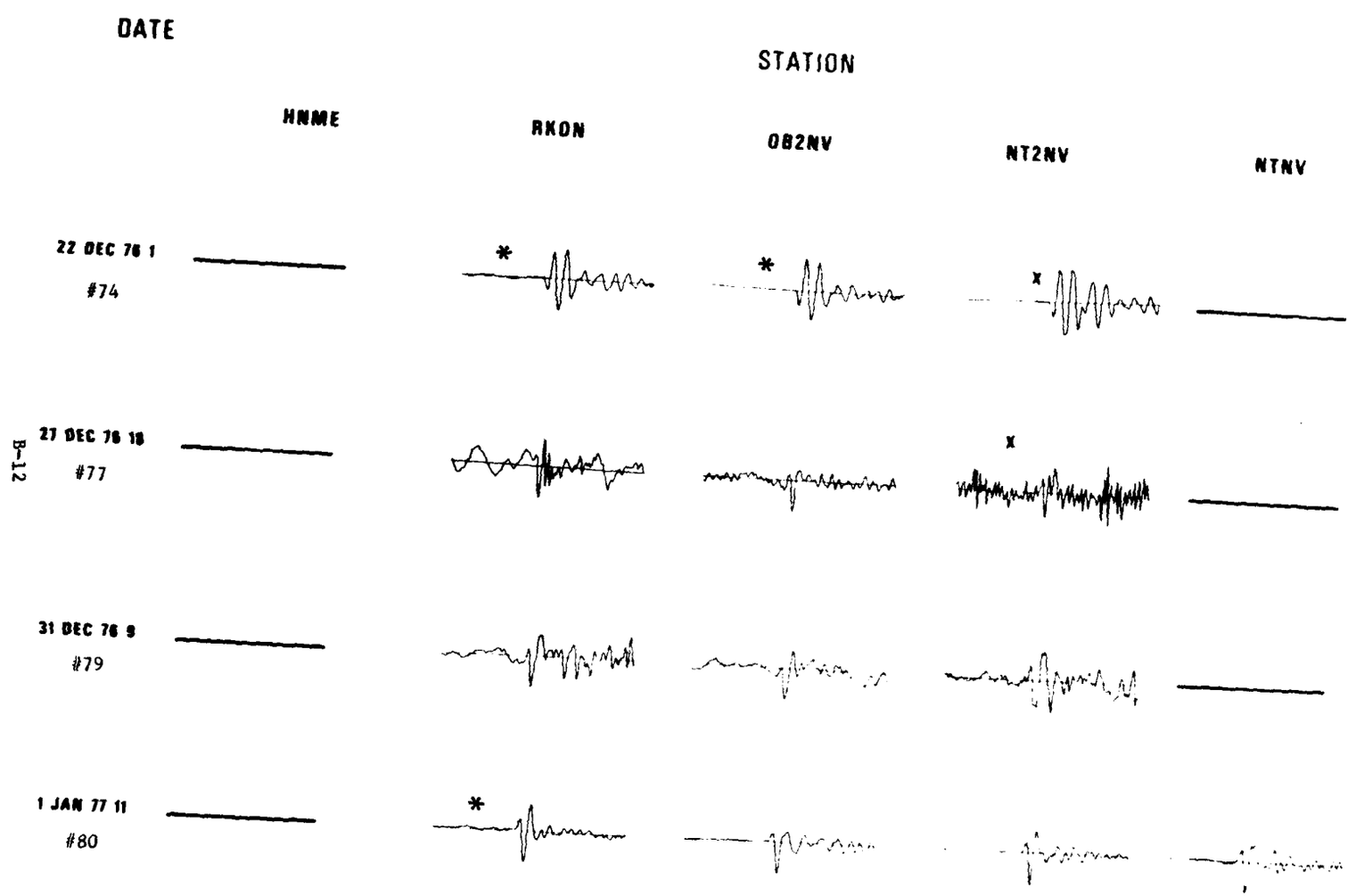

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
15 NOV 76 14
#51
22 NOV 76 20
#53
23 NOV 76 5
SHOT
#27
26 NOV 76 23
#54

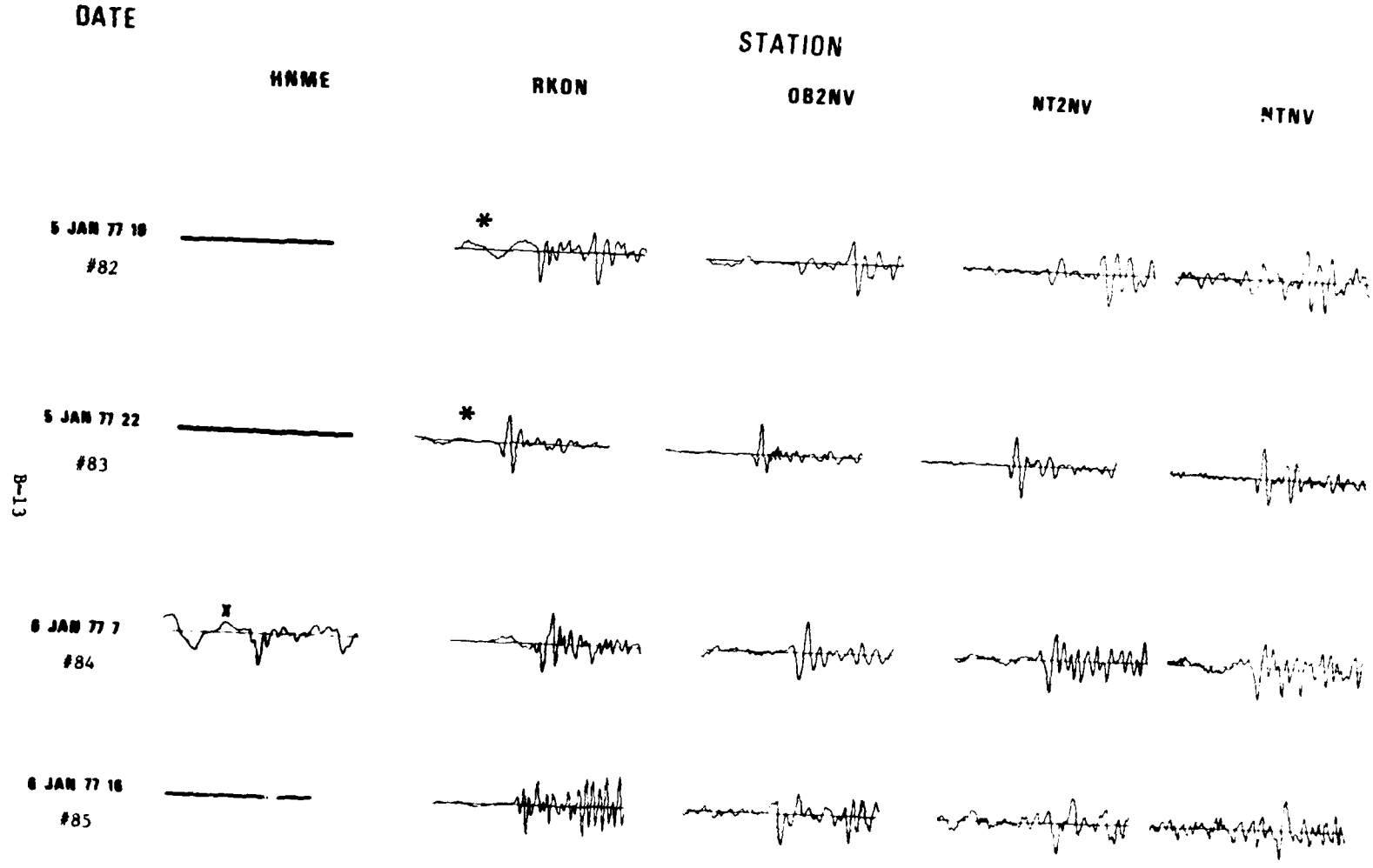

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
30 NOV 78 08
#59
1 DEC 78 14
#55
1 DEC 78 17
#56
3 DEC 78 5
#57

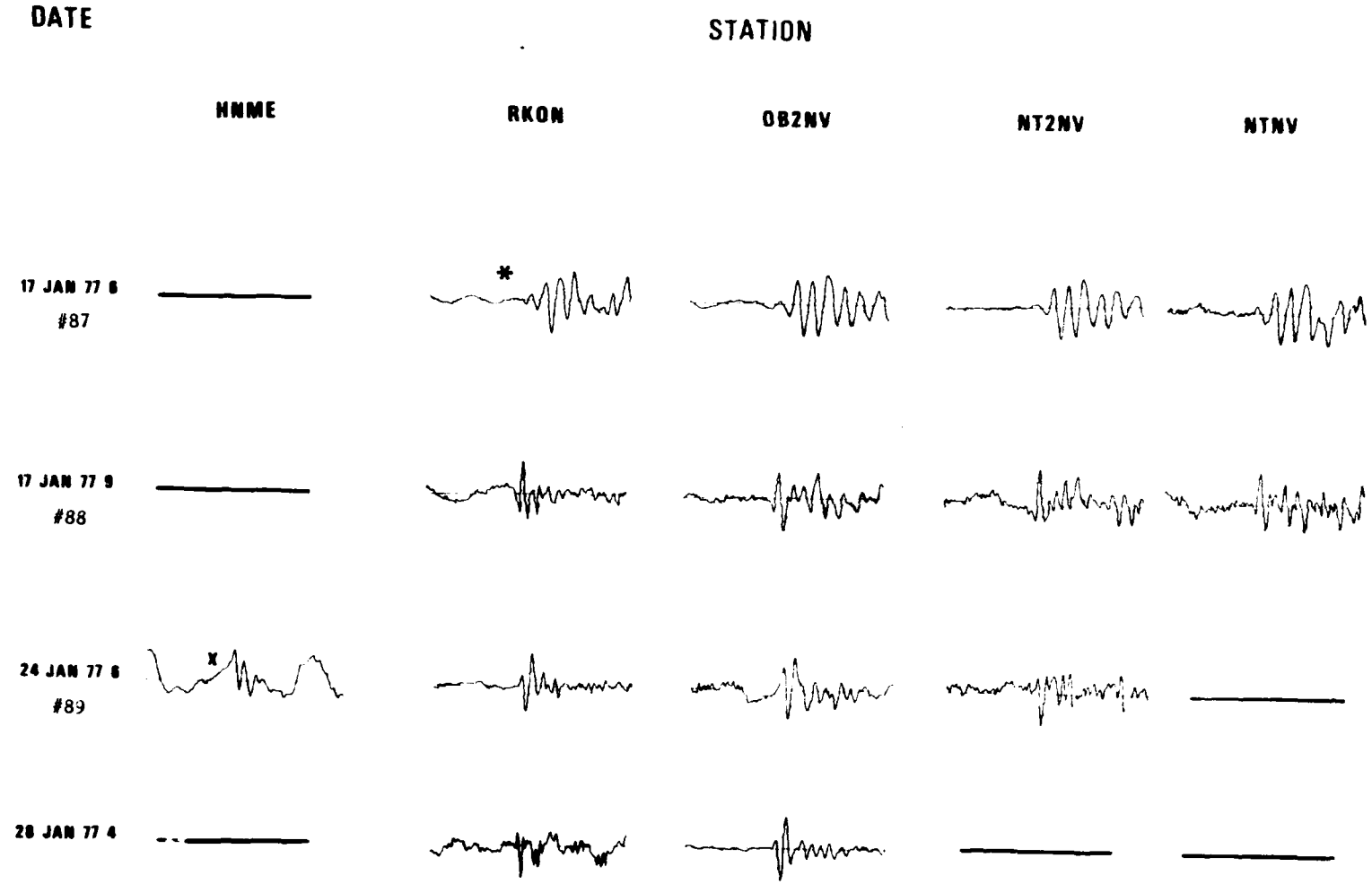

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
3 DEC 76 23
#58
4 DEC 76 5
#60
4 DEC 76 12
#61
5 DEC 76 22
#62
*
*


DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
6 DEC 76 19
#63
7 DEC 76 9
#64
13 DEC 76 23
#75
14 DEC 76 16
#76


DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
15 DEC 76 12
#71
18 DEC 76 14
#69
20 DEC 76 18
#70
20 DEC 76 21
#73


DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
22 DEC 76 1
#74
27 DEC 76 18
#77
31 DEC 76 9
#79
1 JAN 77 11
#80

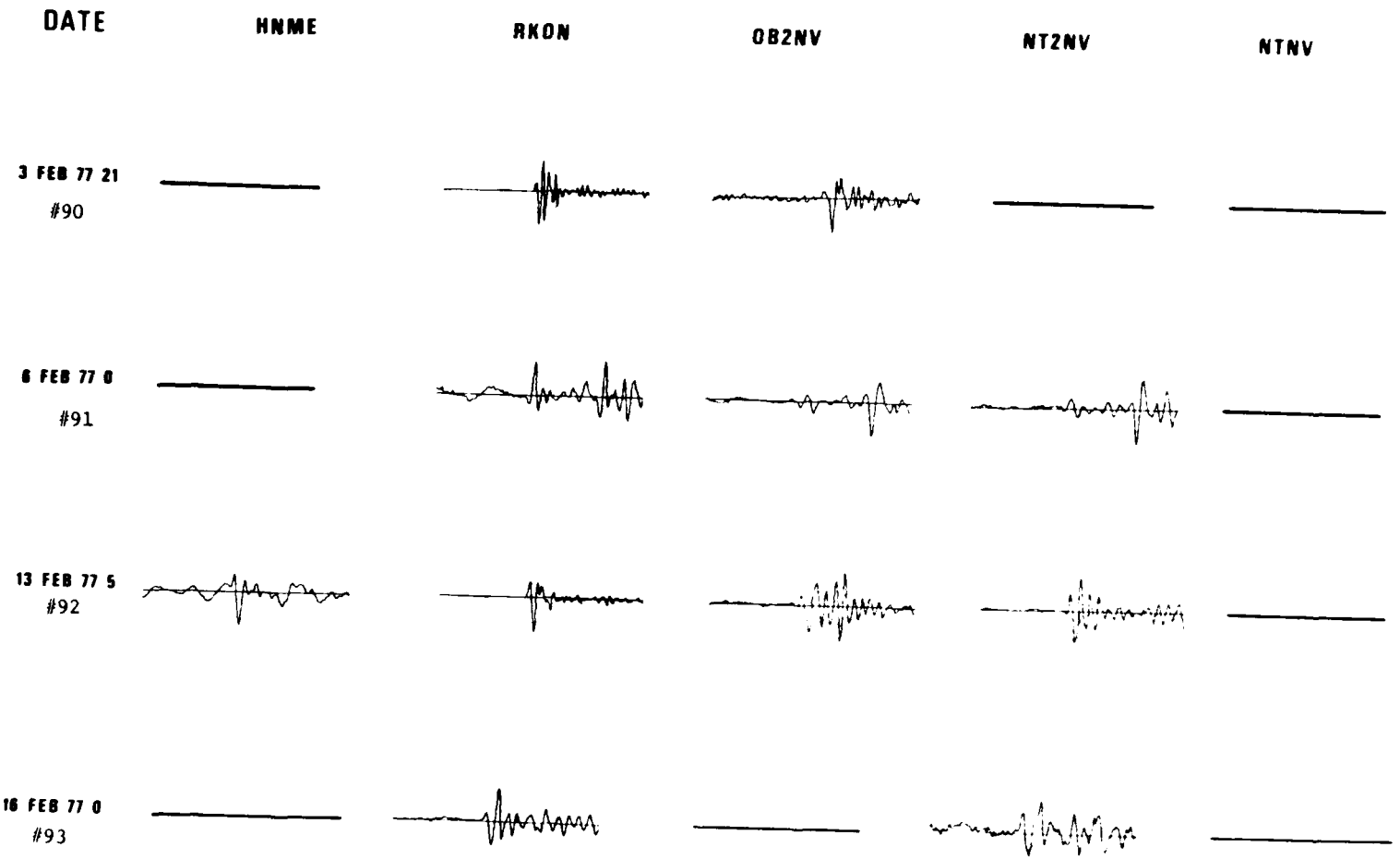

DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
5 JAN 77 18
#82
5 JAN 77 22
#83
6 JAN 77 7
#84
6 JAN 77 16
#85

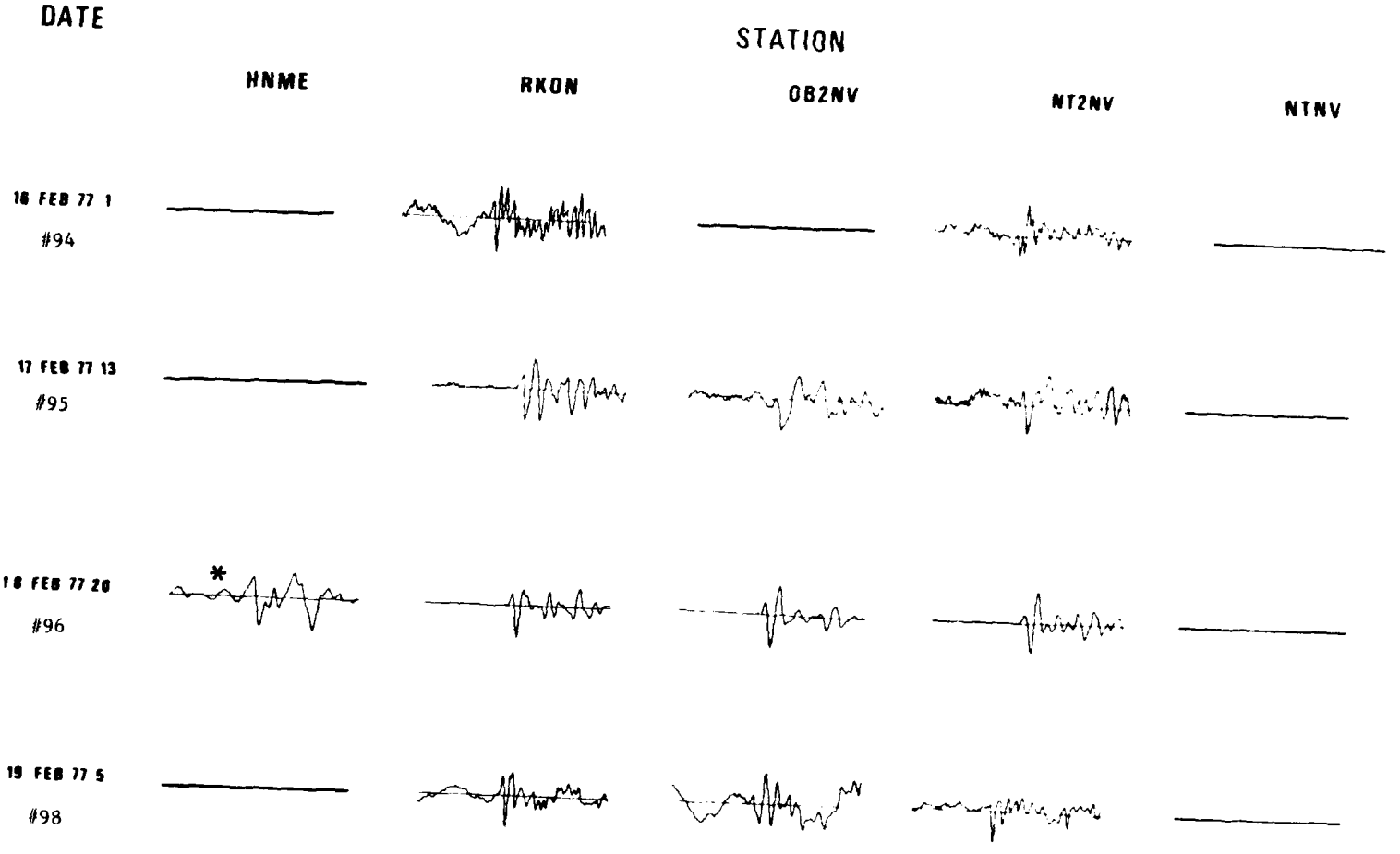


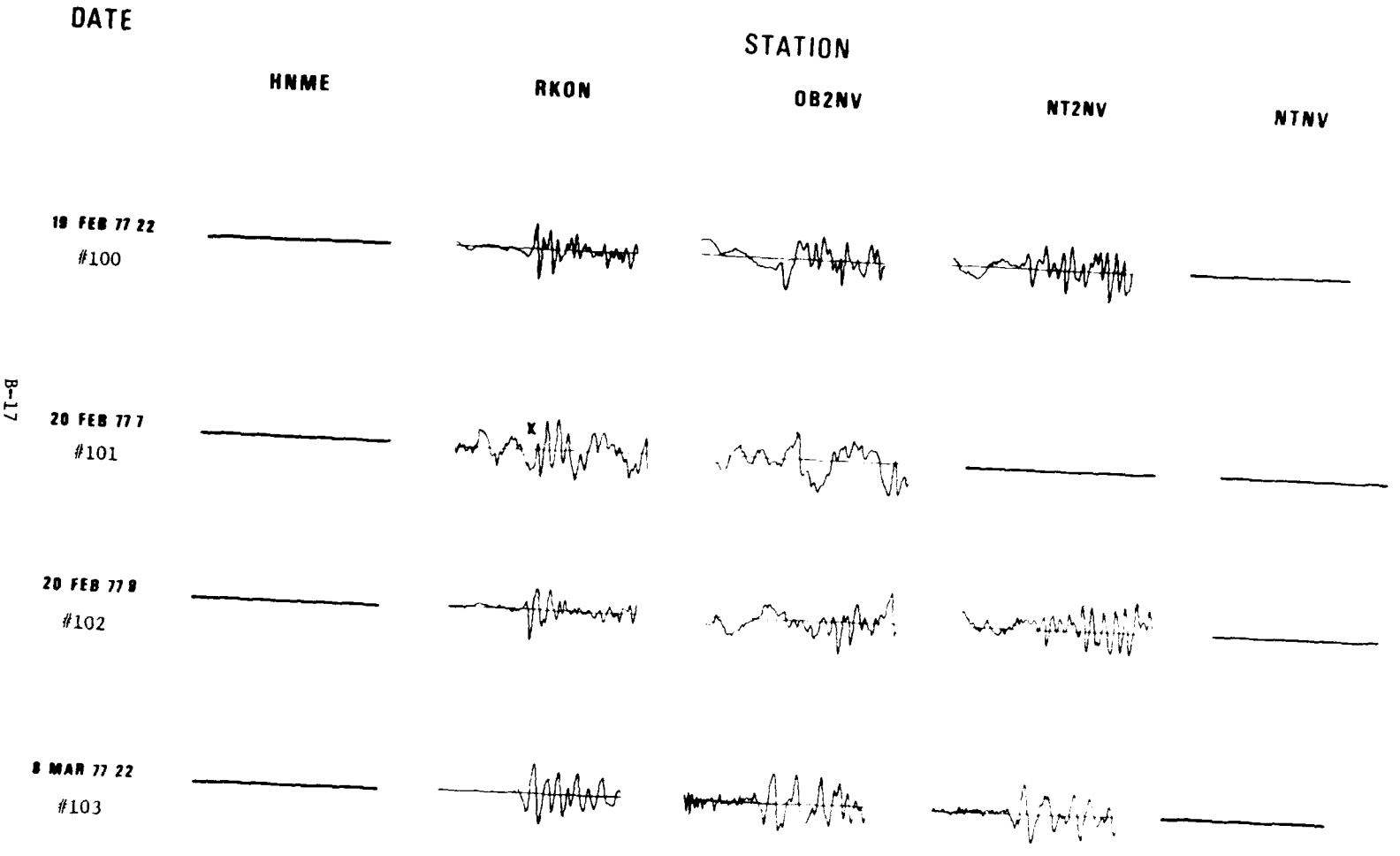


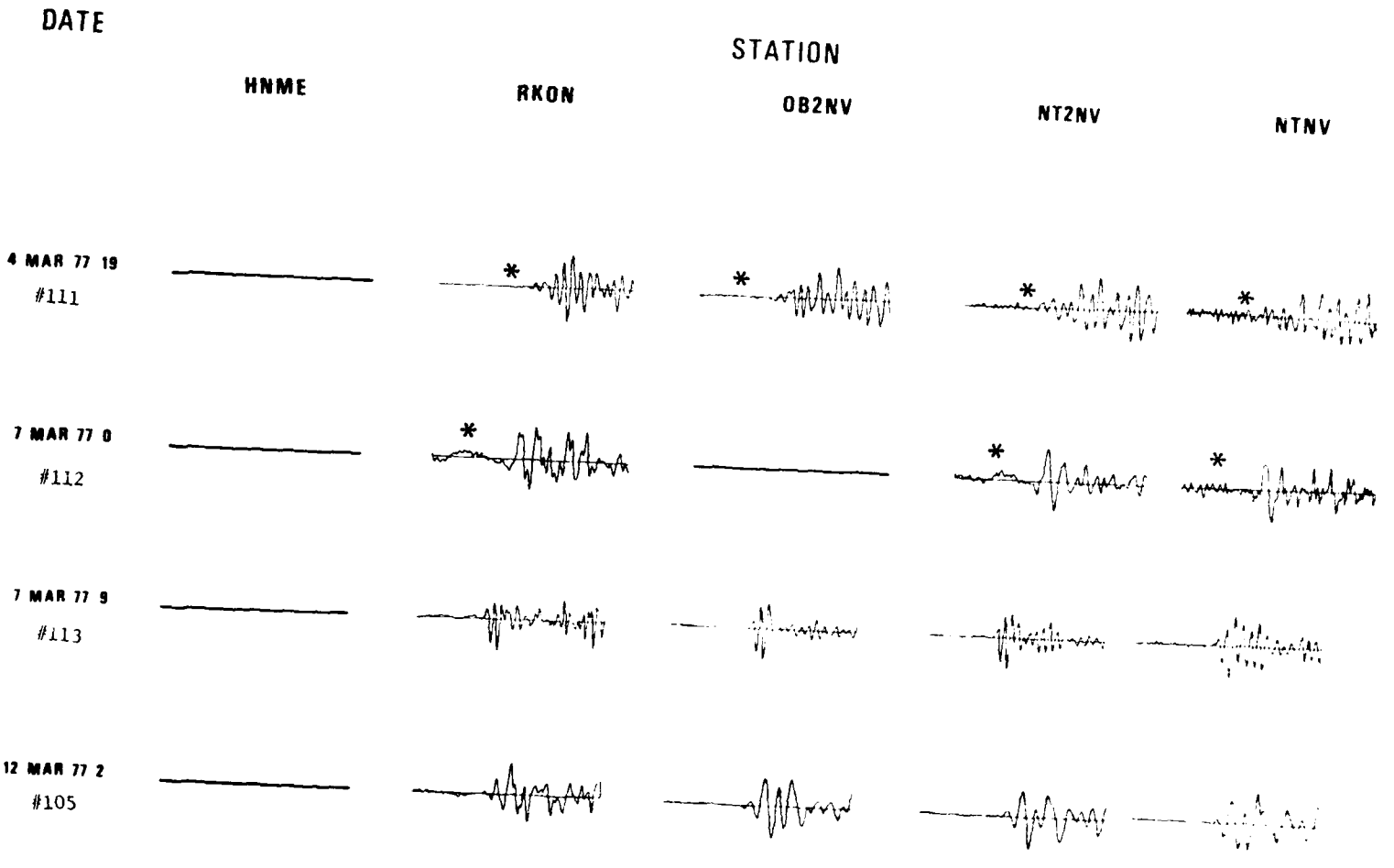

(This Event Inadvertently Omitted From The Data Shown In Appendix A)

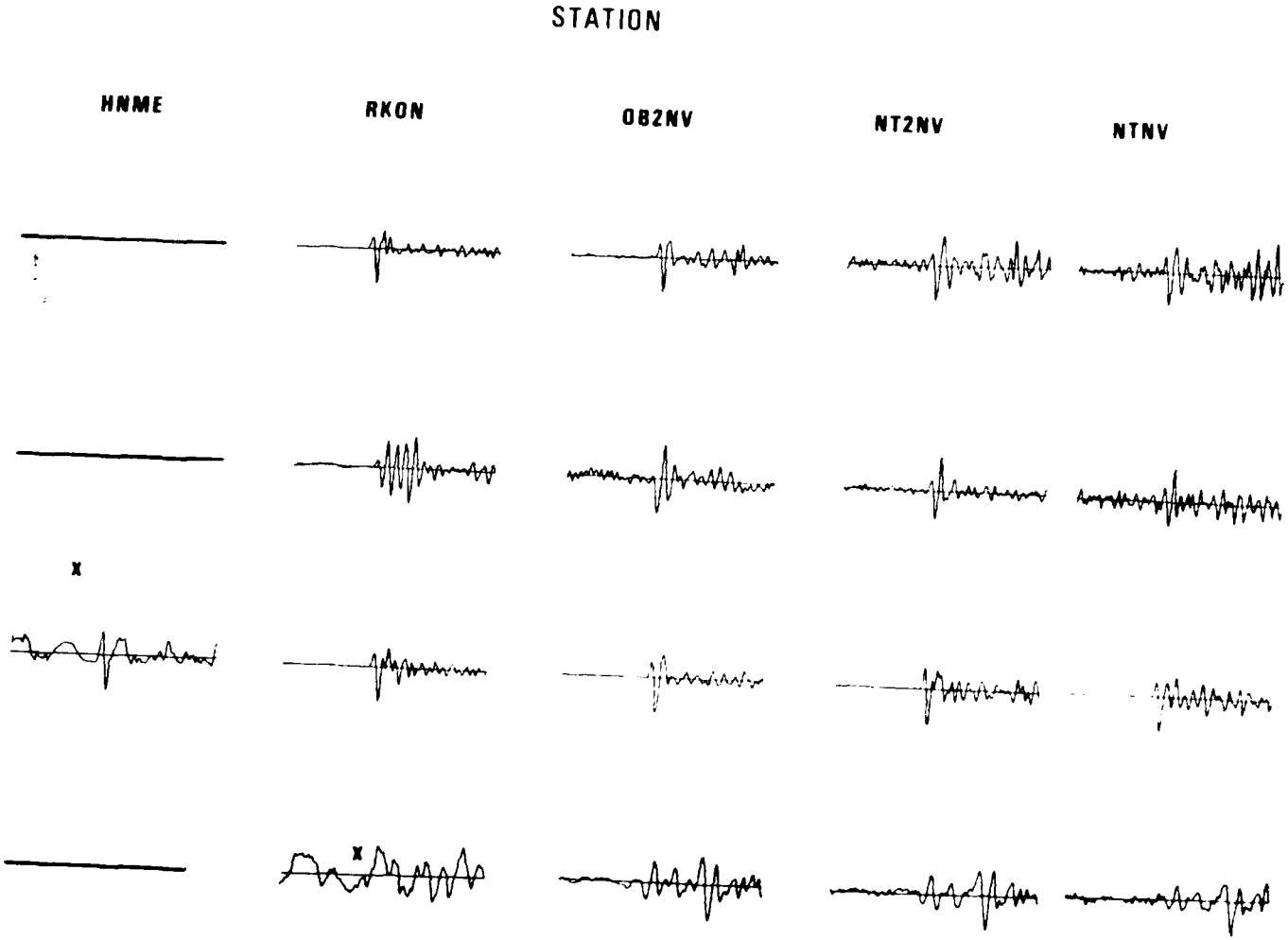
STATION

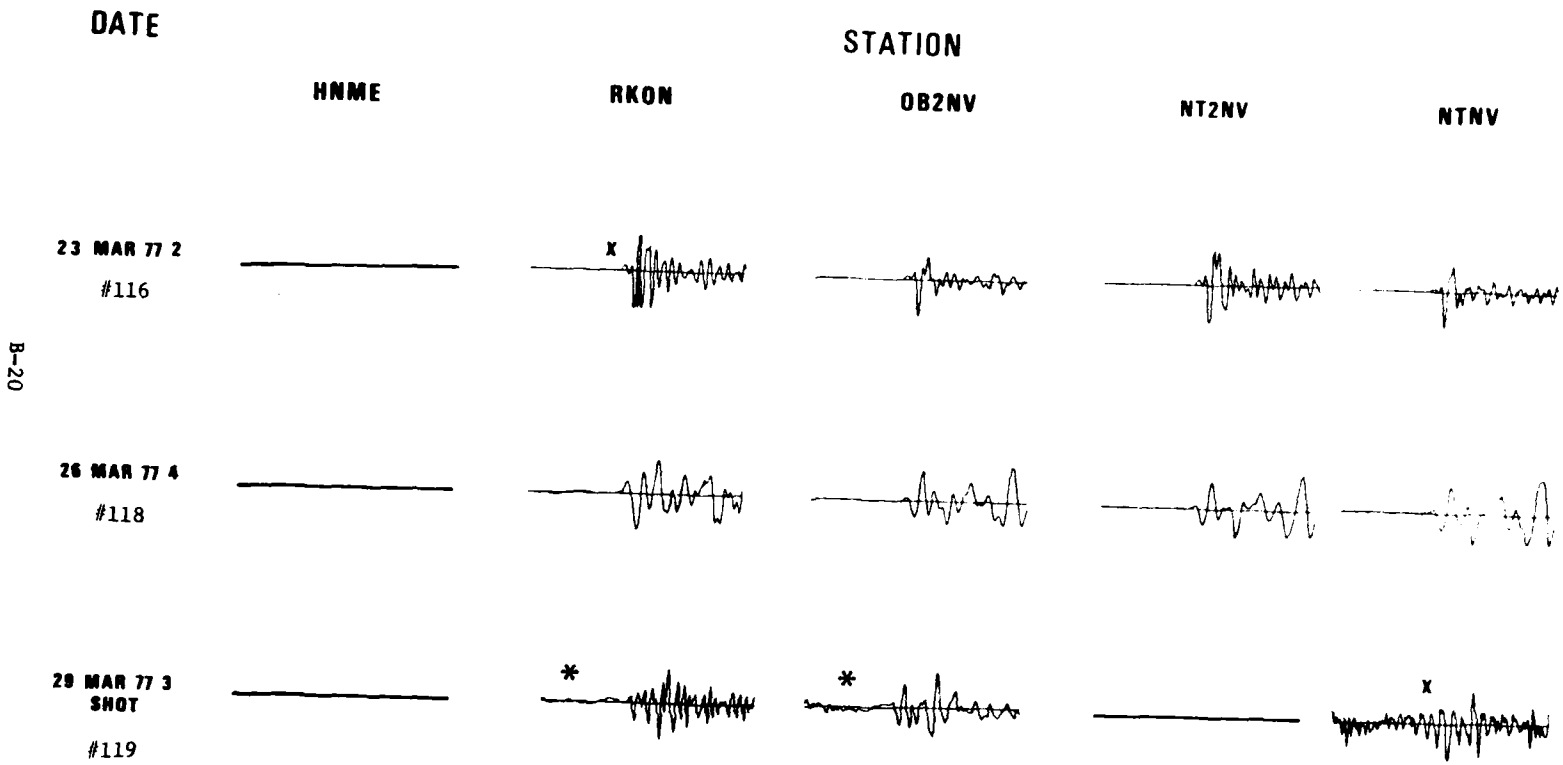

DATE
HNME
RKON
OB2NV
NT2NV
NTNV
3 FEB 77 21
#90
6 FEB 77 0
#91
13 FEB 77 5
#92
16 FEB 77 0
#93


DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
16 FEB 77 1
#94
17 FEB 77 13
#95
18 FEB 77 20
#96
19 FEB 77 5
#98


DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
18 FEB 77 22
#100
20 FEB 77 7
#101
20 FEB 77 8
#102
8 MAR 77 22
#103


DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
4 MAR 77 19
#111
7 MAR 77 0
#112
7 MAR 77 9
#113
12 MAR 77 2
#105

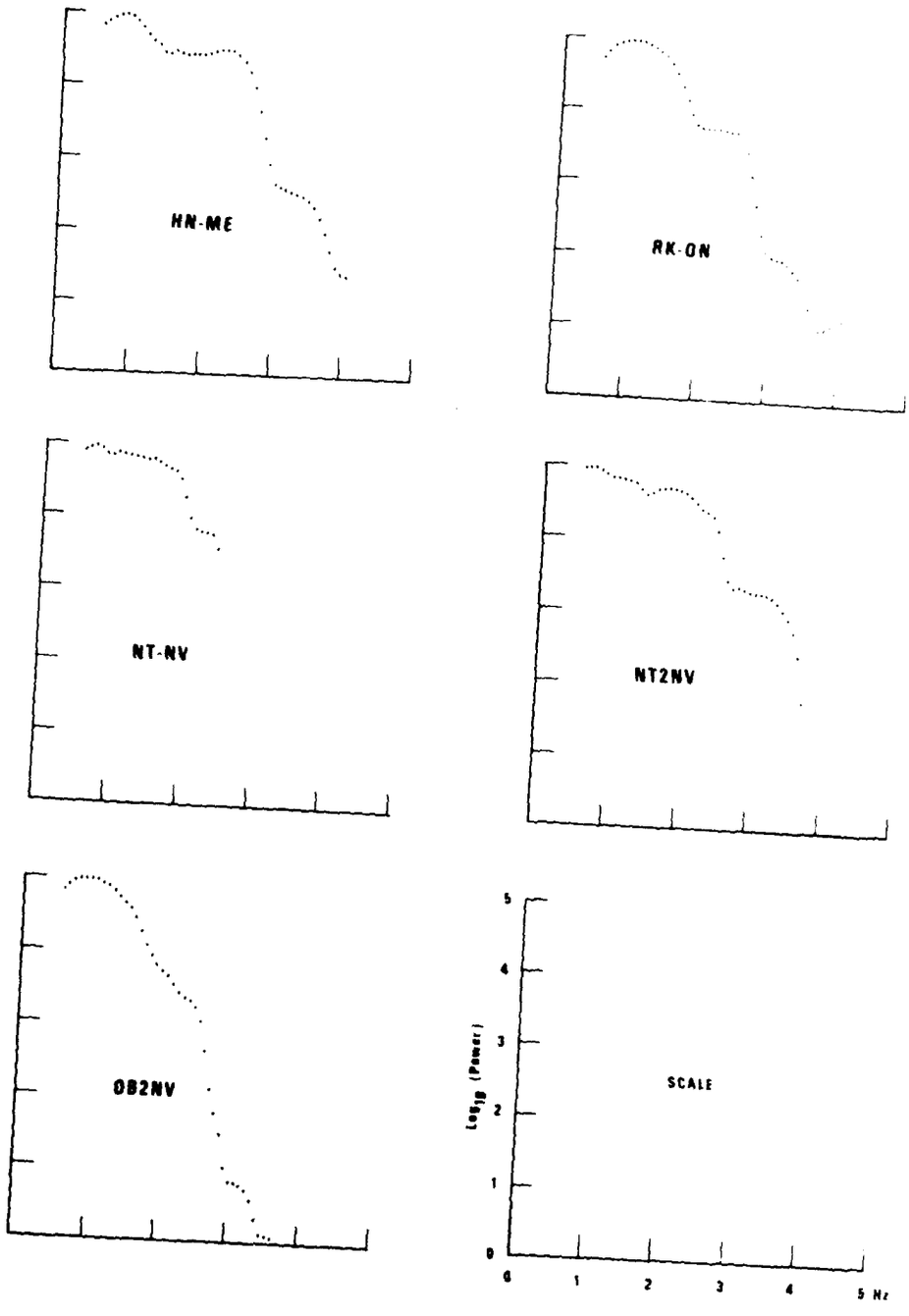

STATION
DATE
HNME
RKON
OB2NV
NT2NV
NTNV
13 MAR 77 4
#106
15 MAR 77 21
#108
19 MAR 77 10
#110
21 MAR 77 4
#114


DATE
STATION
HNME
RKON
OB2NV
NT2NV
NTNV
23 MAR 77 2
#116
26 MAR 77 4
#118
29 MAR 77 3
SHOT
#119
X
*
*
X

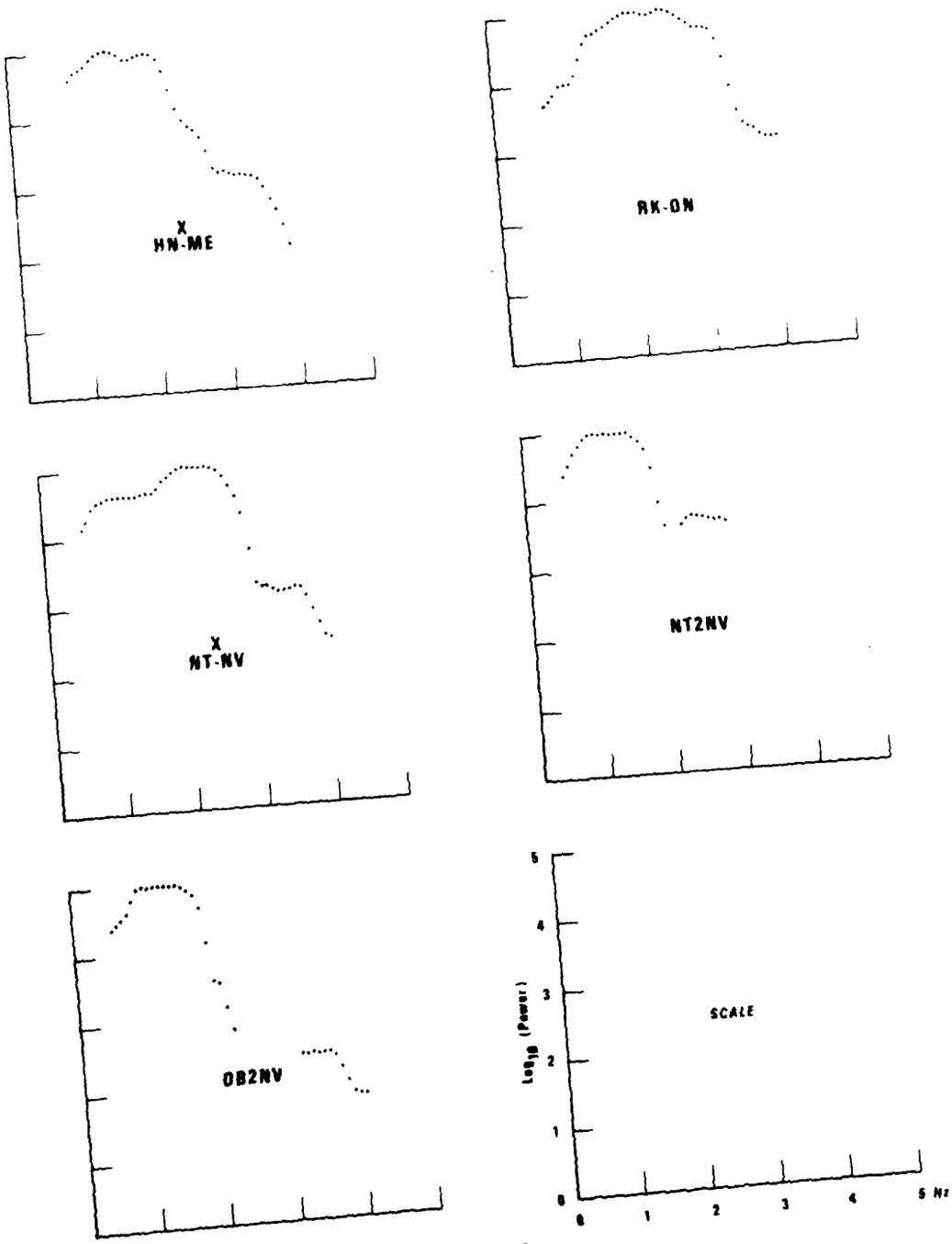
# APPENDIX C

Power spectra of waveforms in Appendix B

22 SEP 76
0:16:9.3
KURILES
#86

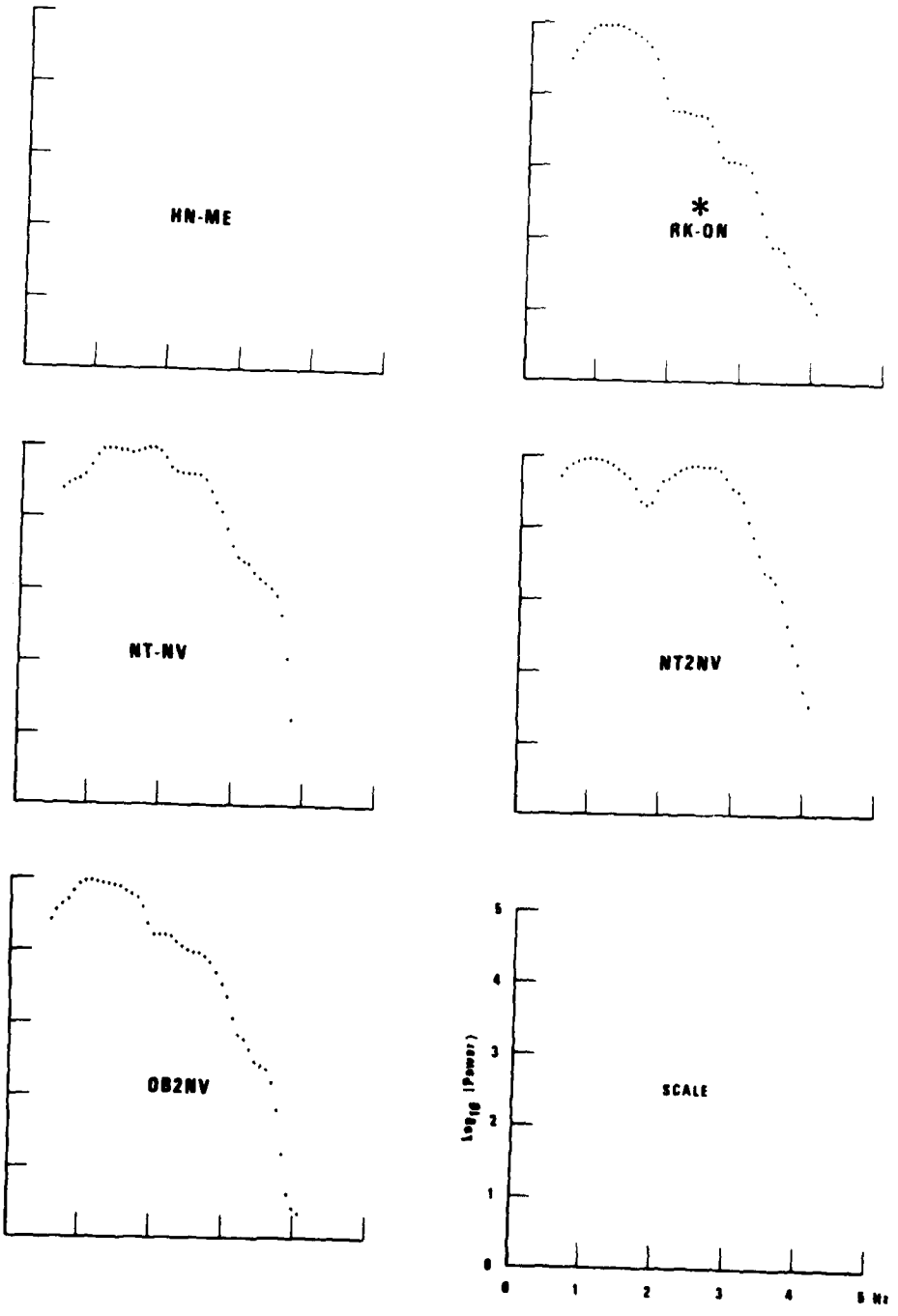


22 SEP 76
2:30:30.8
ALEUTIANS
#19



**22 SEP 76**
**8:20:27.6**
**VOLCANO ISLAND**

#20

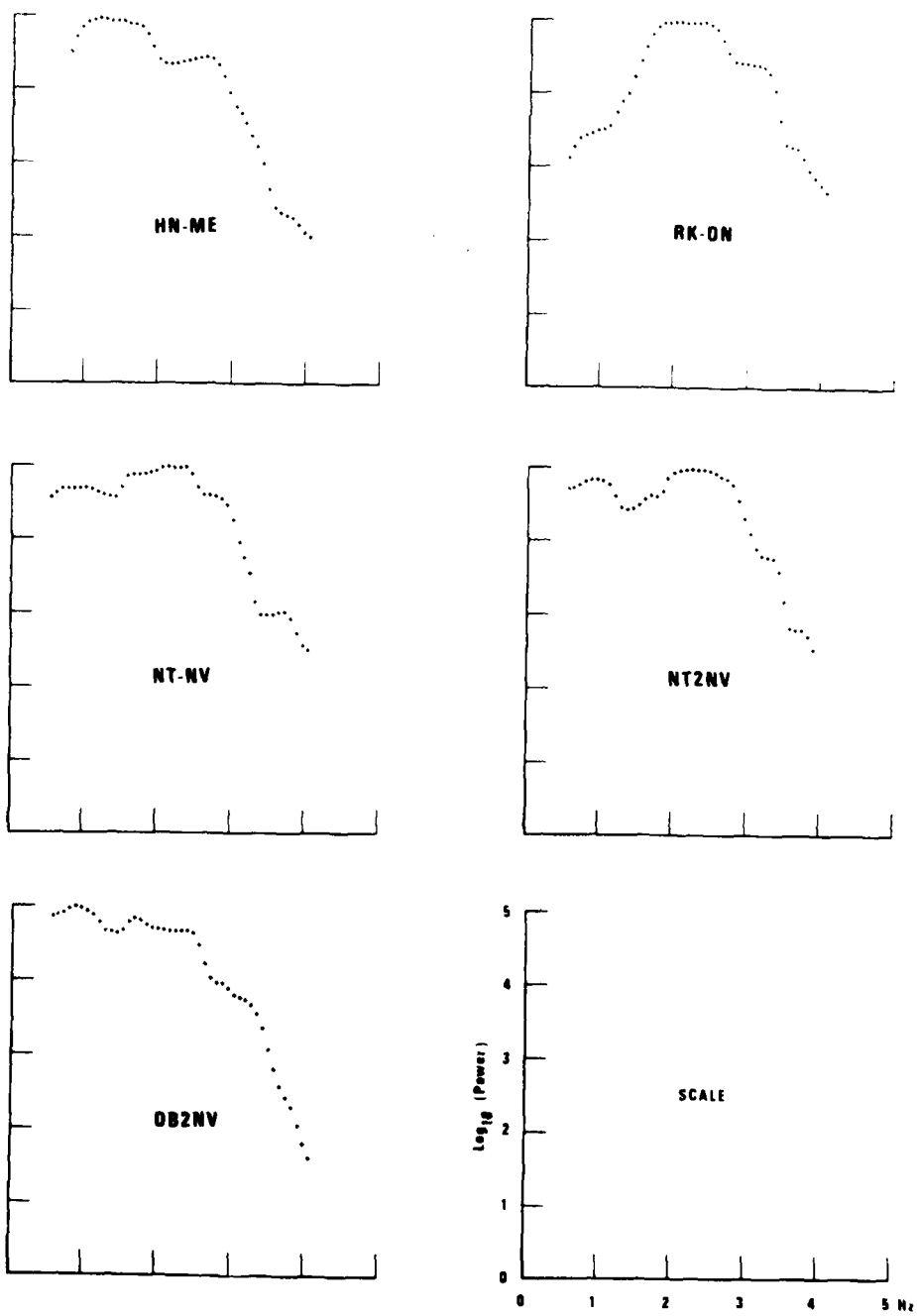


29 SEP 76

3:0:0.0

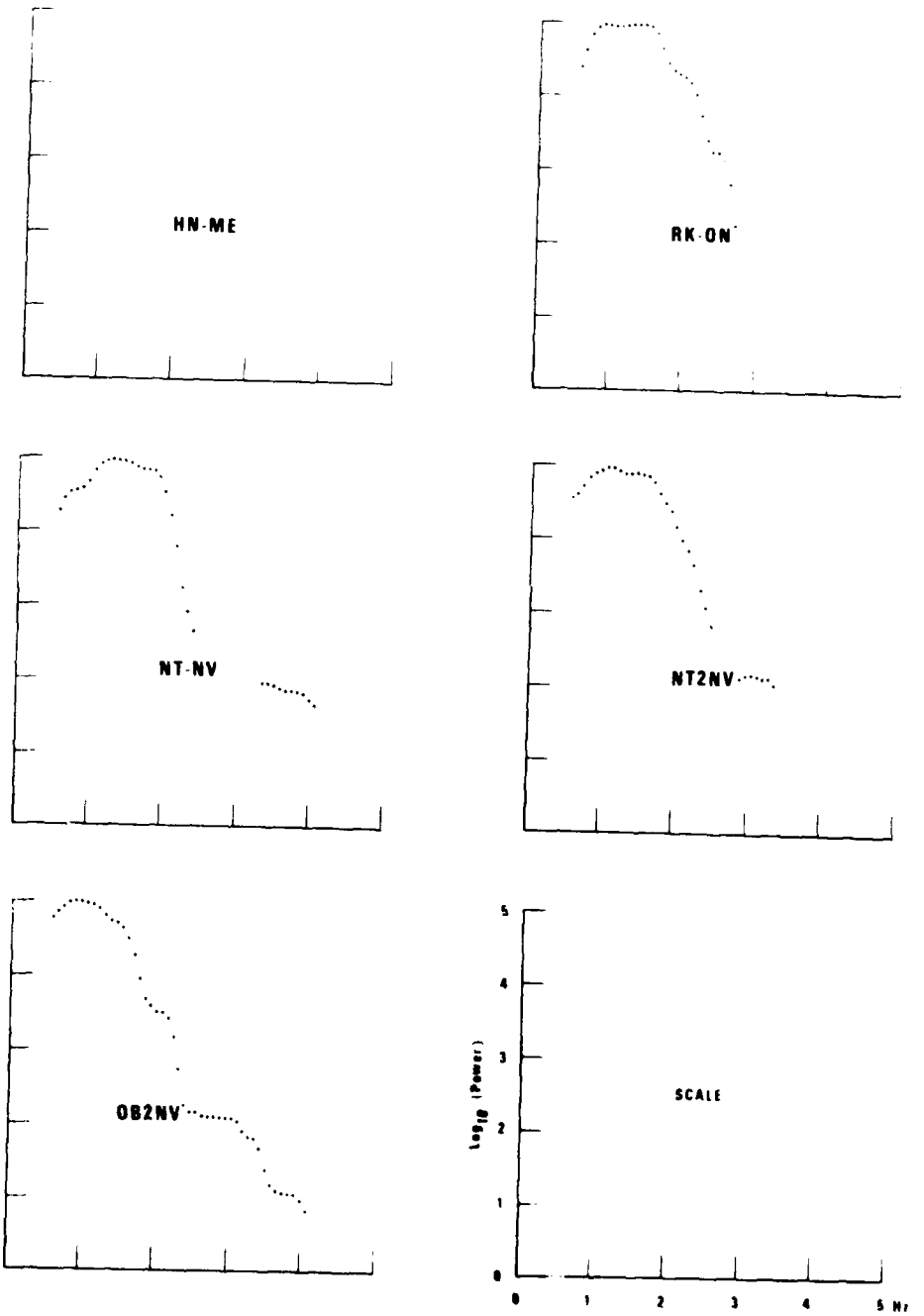
NOVAYA ZEMLYA

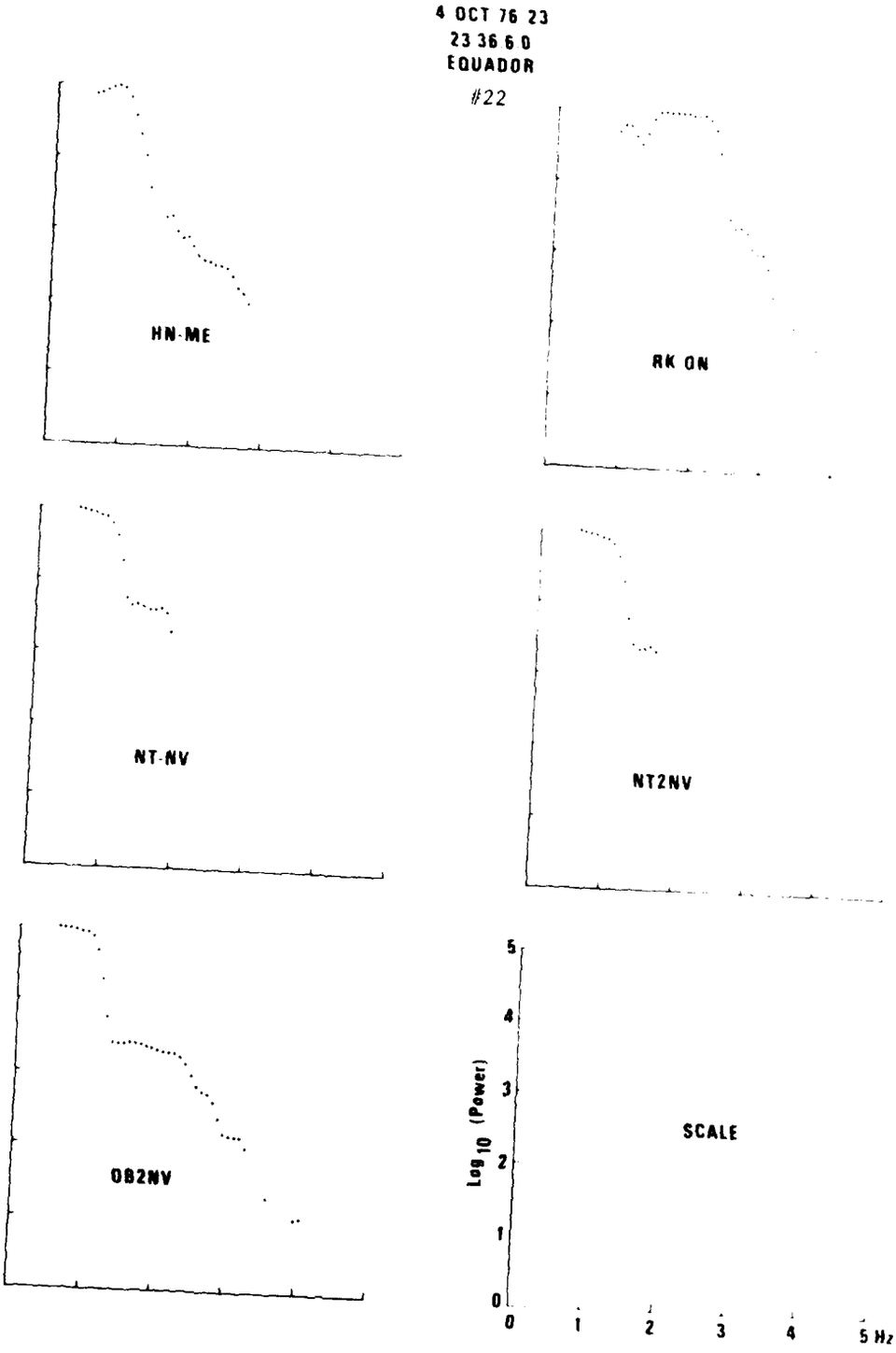
#4



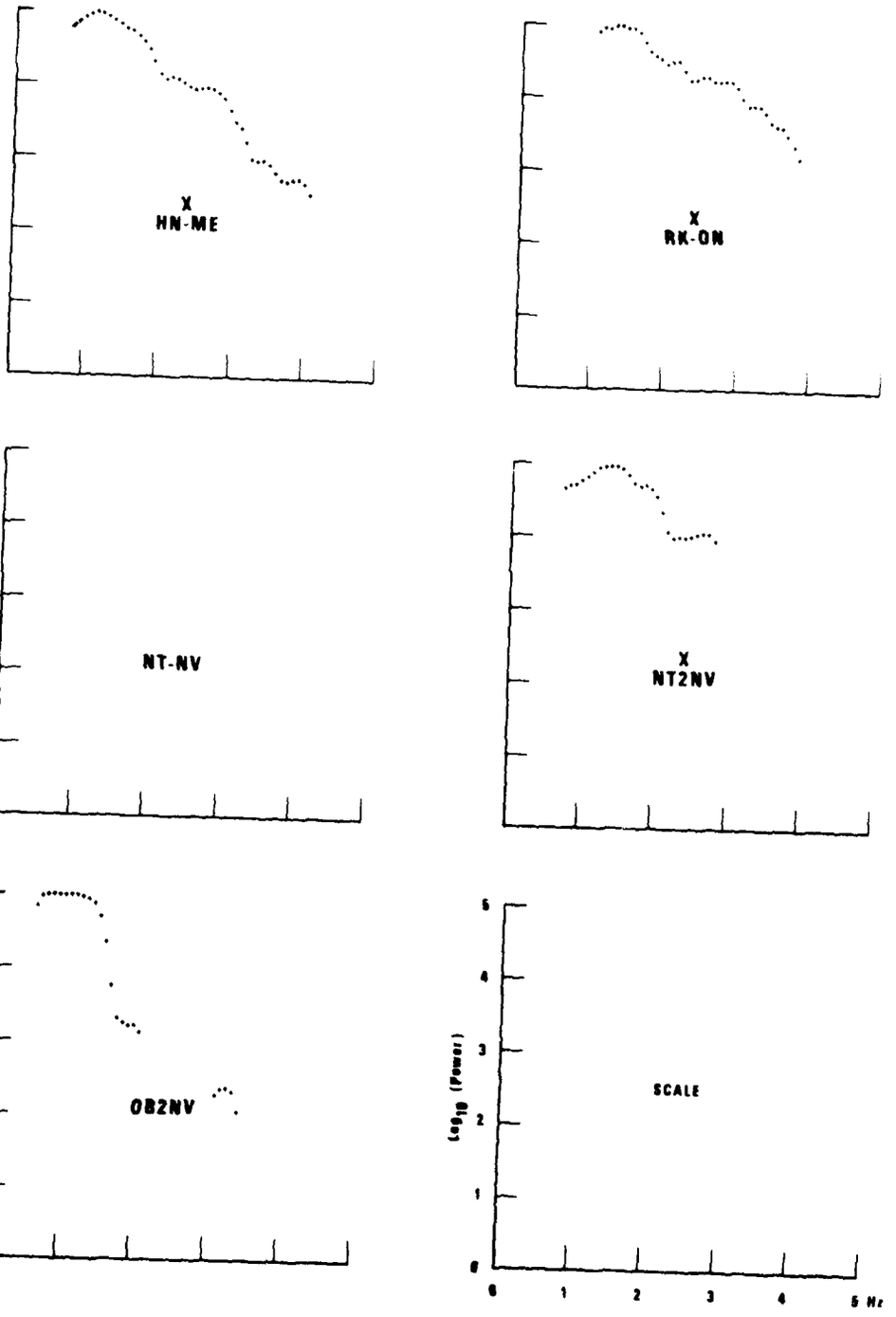
30 SEP 76
8:4:10.9
CHILE-ARGENTINA BORDER

#16




4 OCT 76 23
23 36 6 0
EQUADOR
#22
HN-ME
RK ON
NT-NV
NT2NV
OB2NV
SCALE
$Log_{10}$ (Power)
0
1
2
3
4
5
0
1
2
3
4
5 Hz

8 OCT 76
14:38:27.9
KURILES
#26

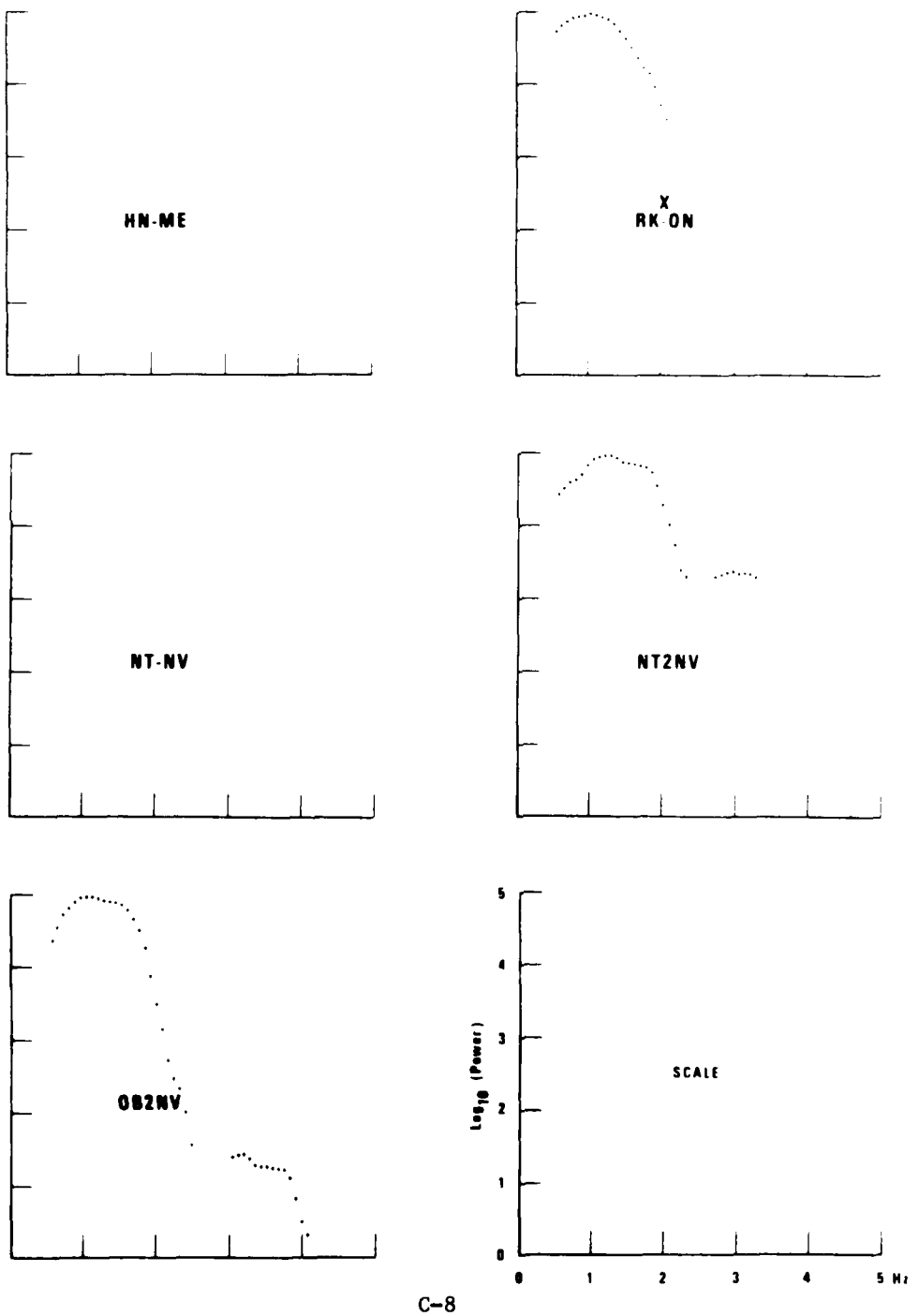


9 OCT 78

2:52:24.3

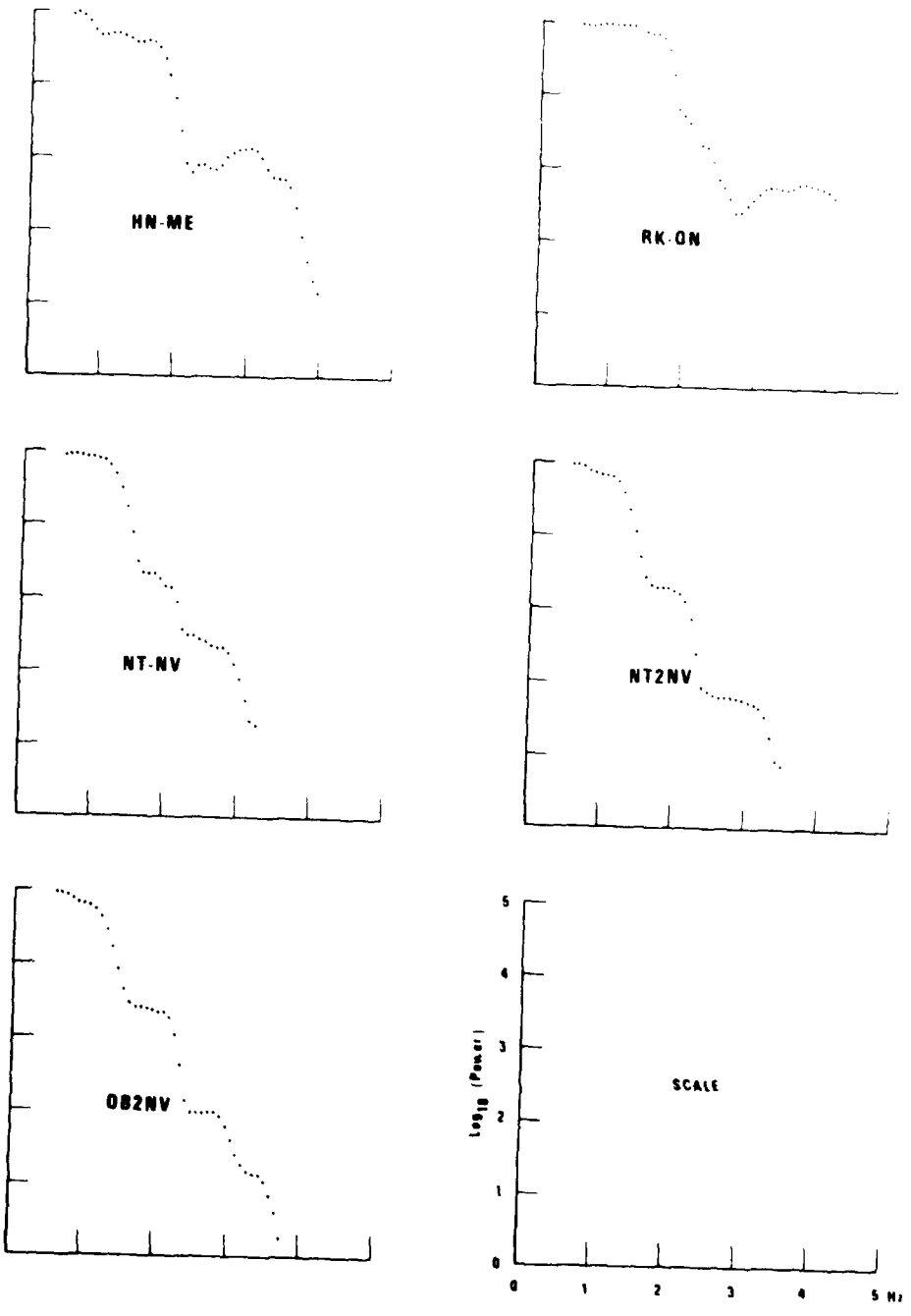
KURILES

#29



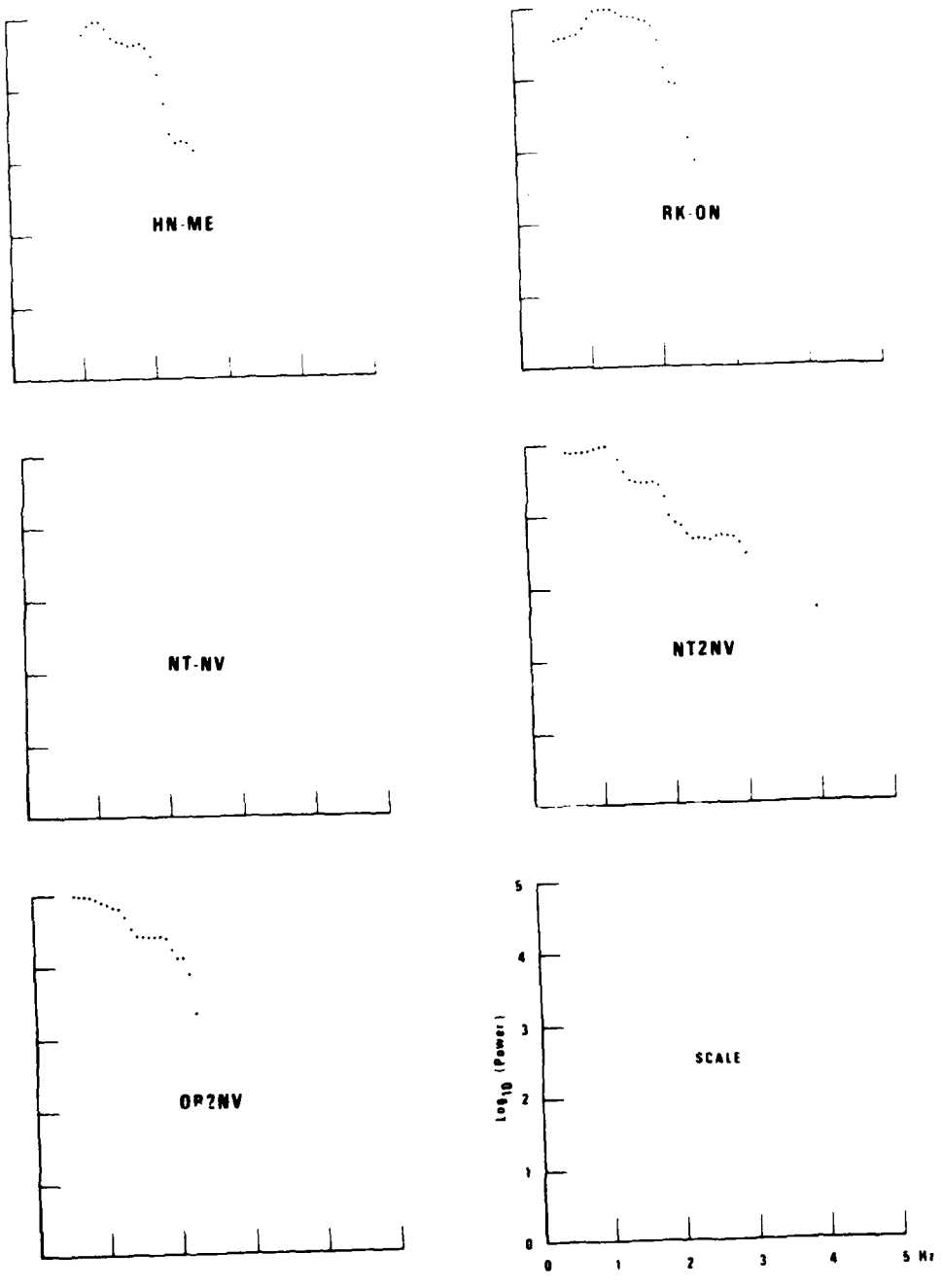
9 OCT 76
12:31:6.6
COSTA RICA

#28



9 OCT 76
16:2:26.9
N. COLUMBIA

#30

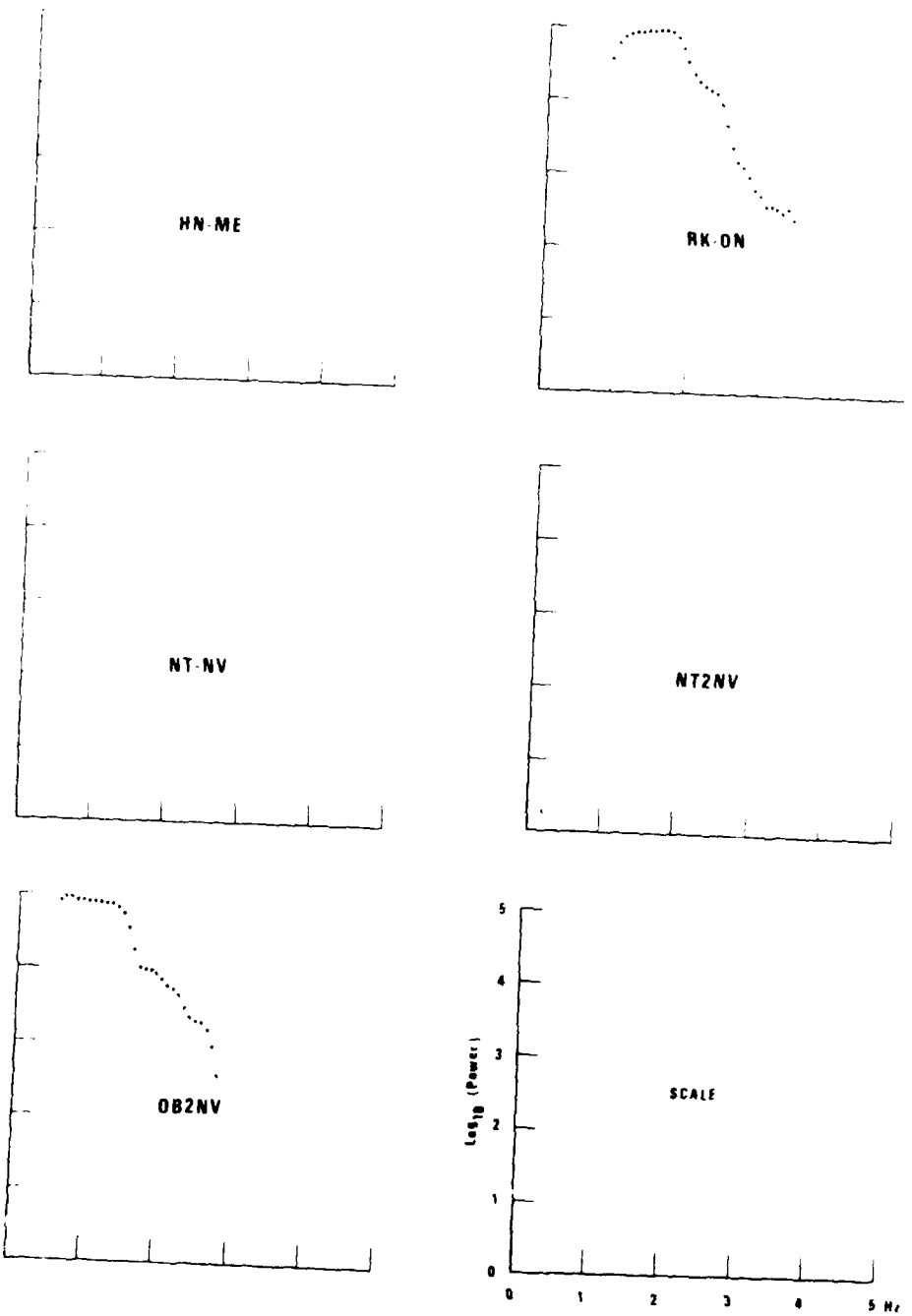


9 OCT 76

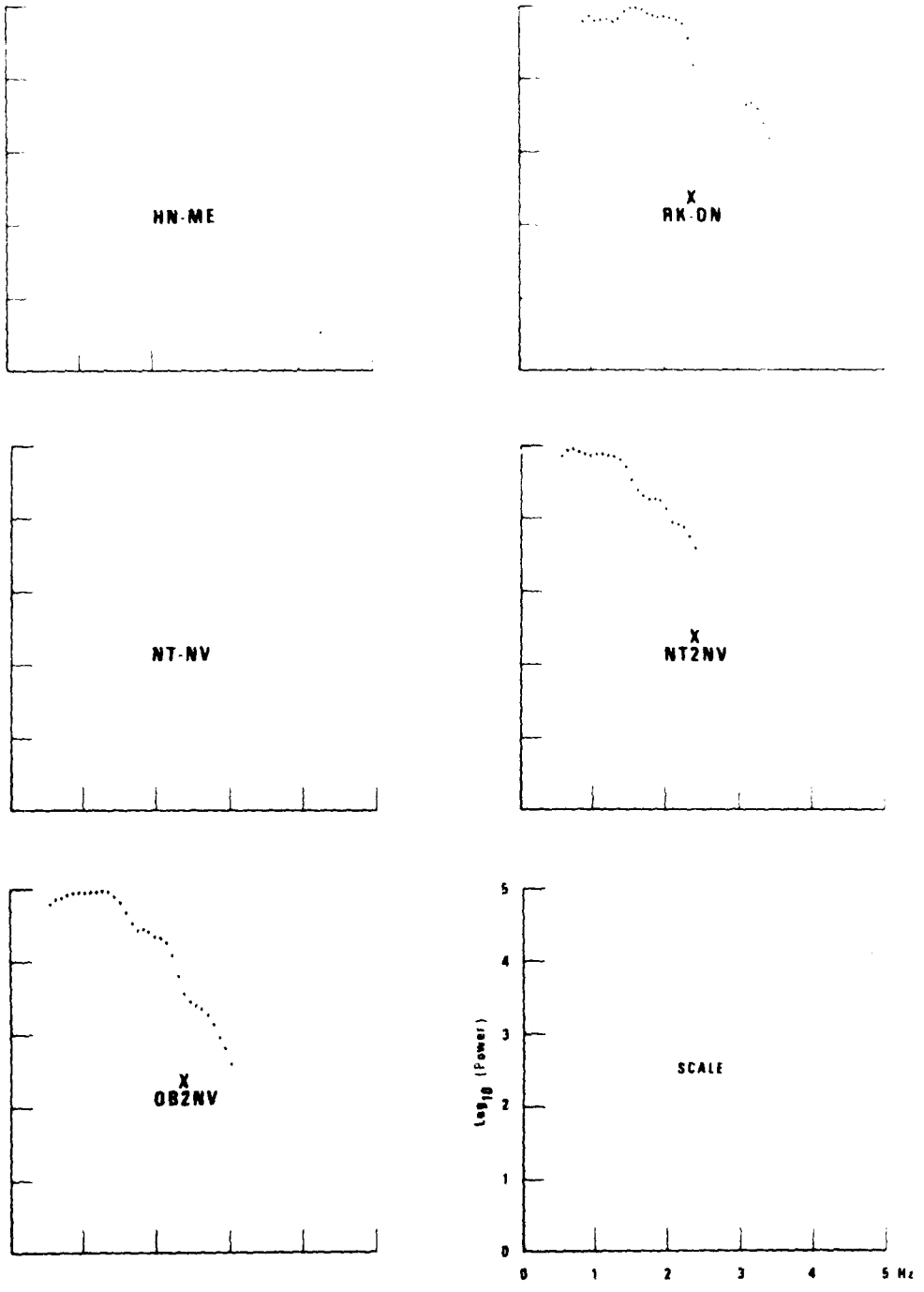
21:10:24.1

PERU COAST

#32

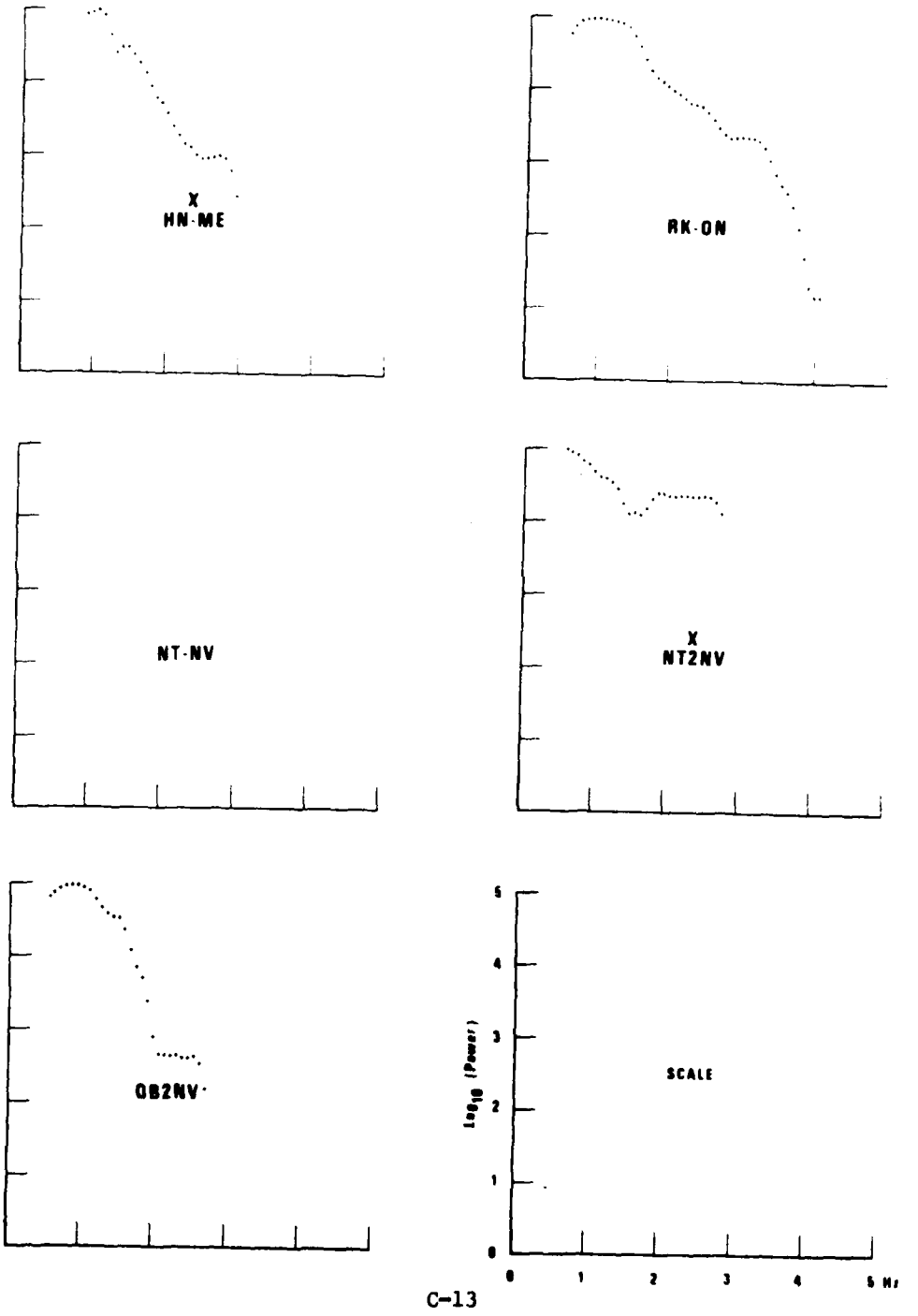


9 OCT 76
23 48 9 0
COAST OF CEN AMERICA
#33



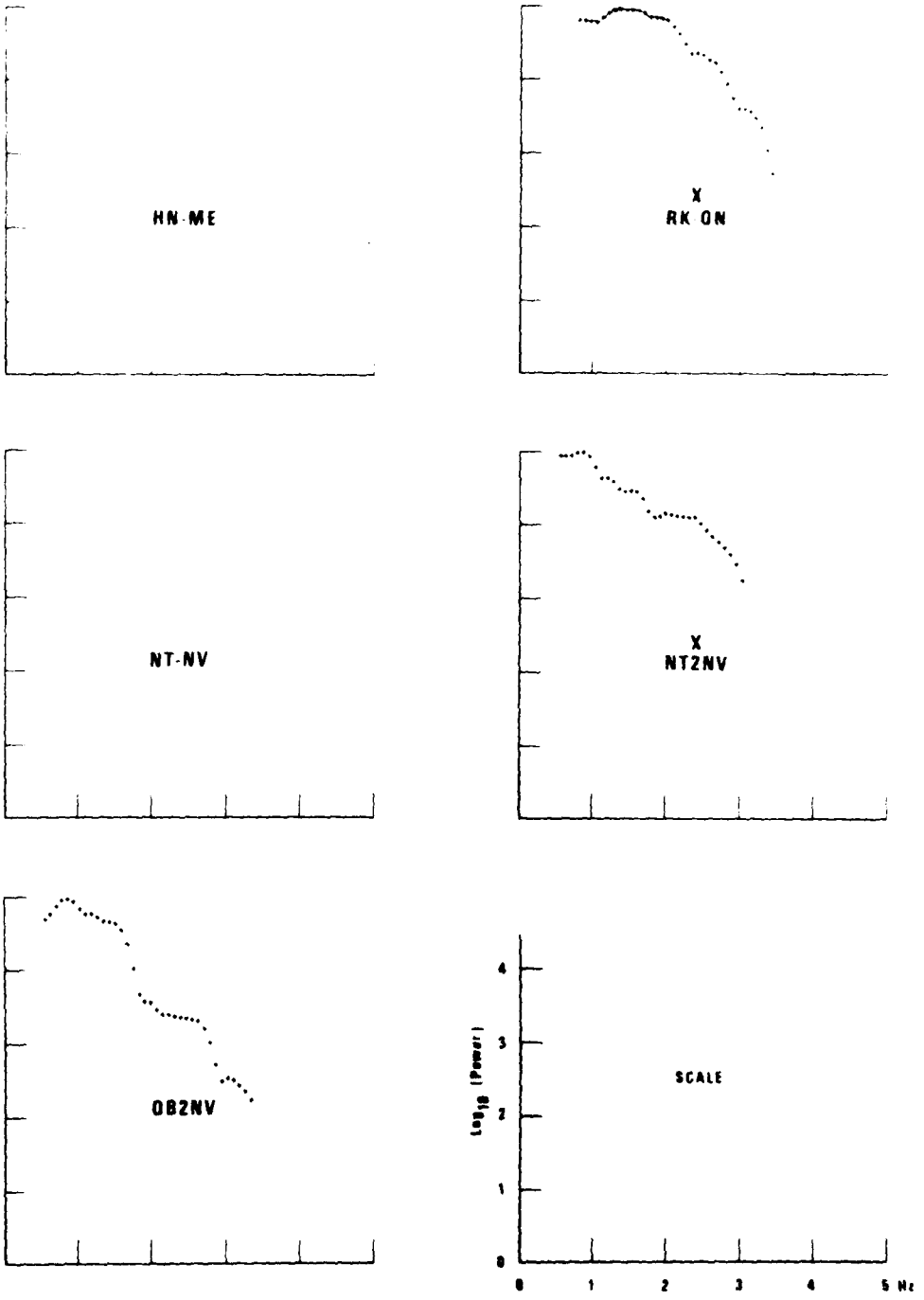
10 OCT 76
2:58:56.6
KURILES

#34



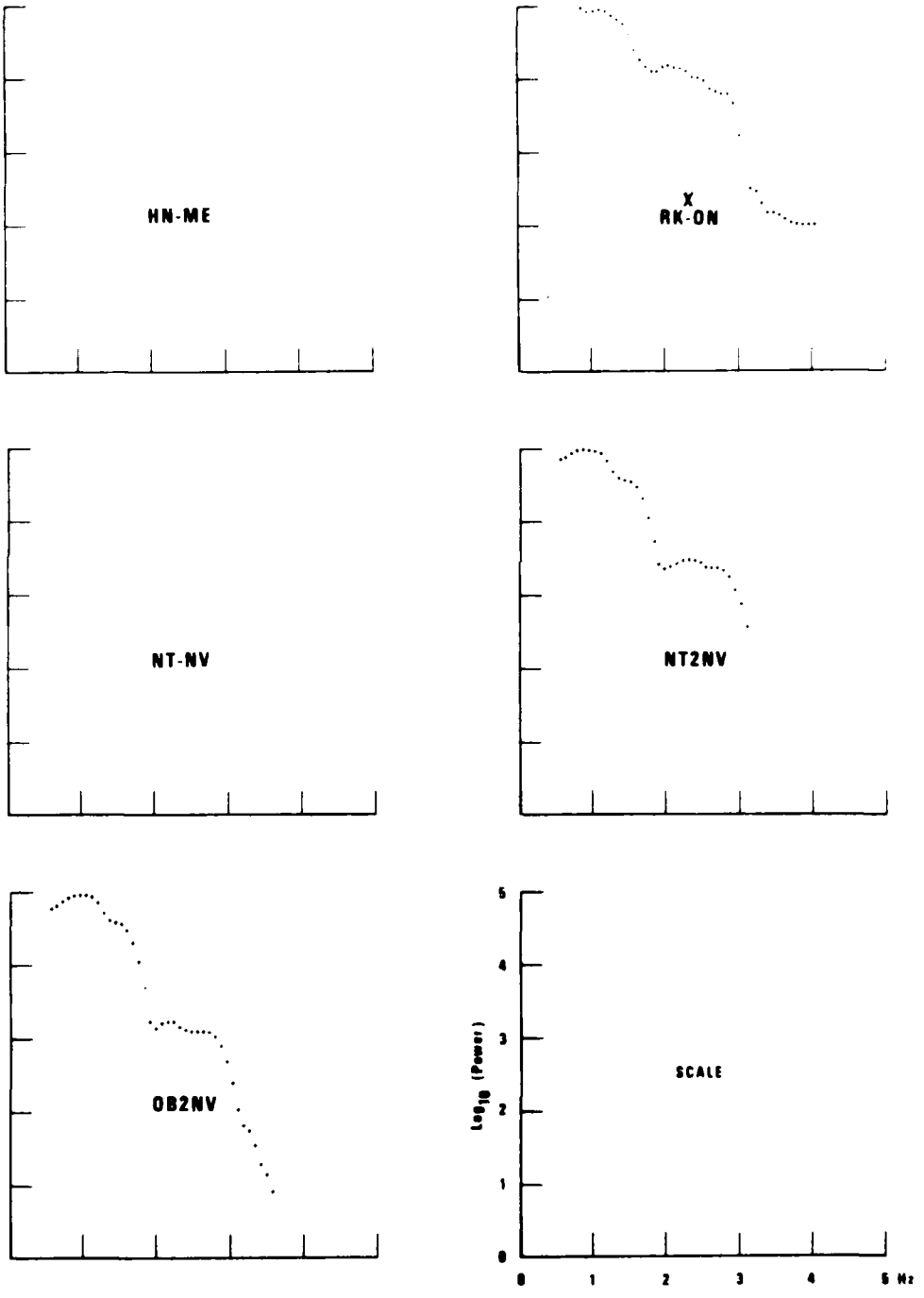
10 OCT 78
14:32:4.8
KURILES

#36



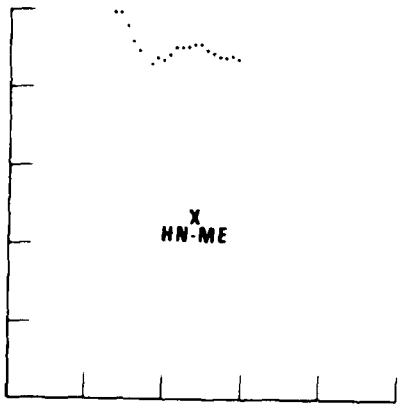
12 OCT 76
4:24:52.1
JAPAN

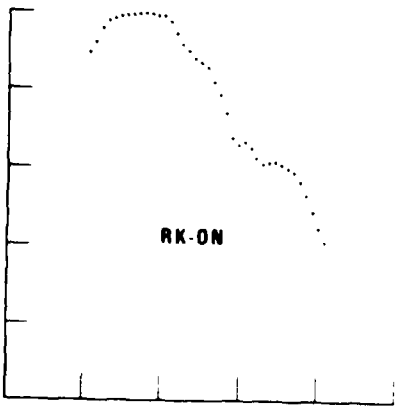
#38

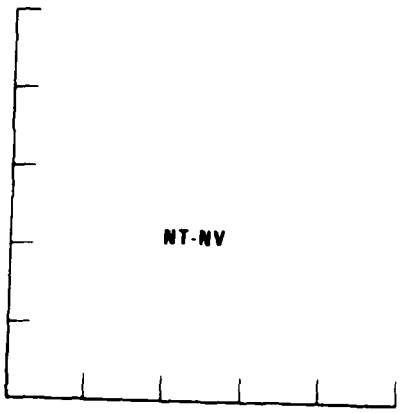


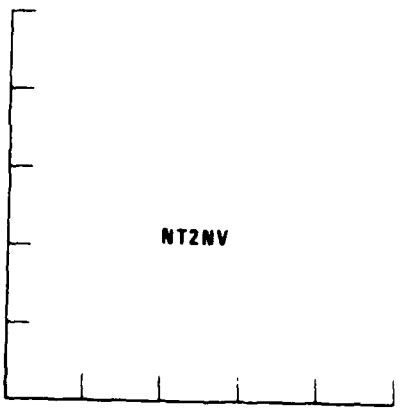
12 OCT 76
23:49:24.3
COLUMBIA

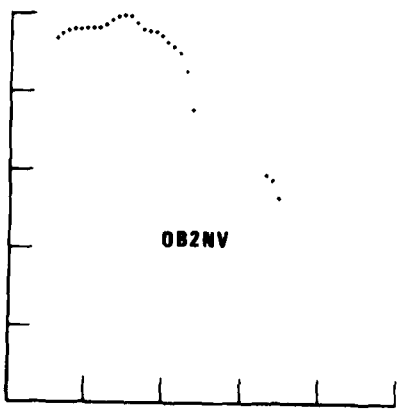
#39

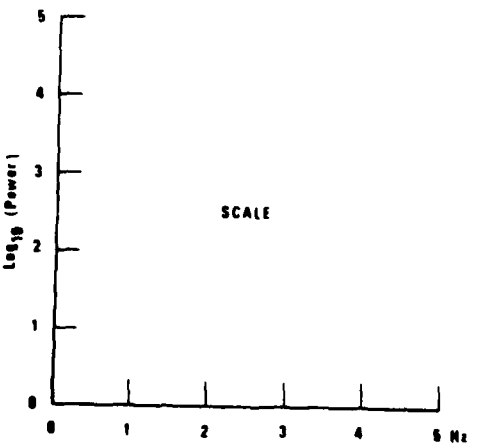


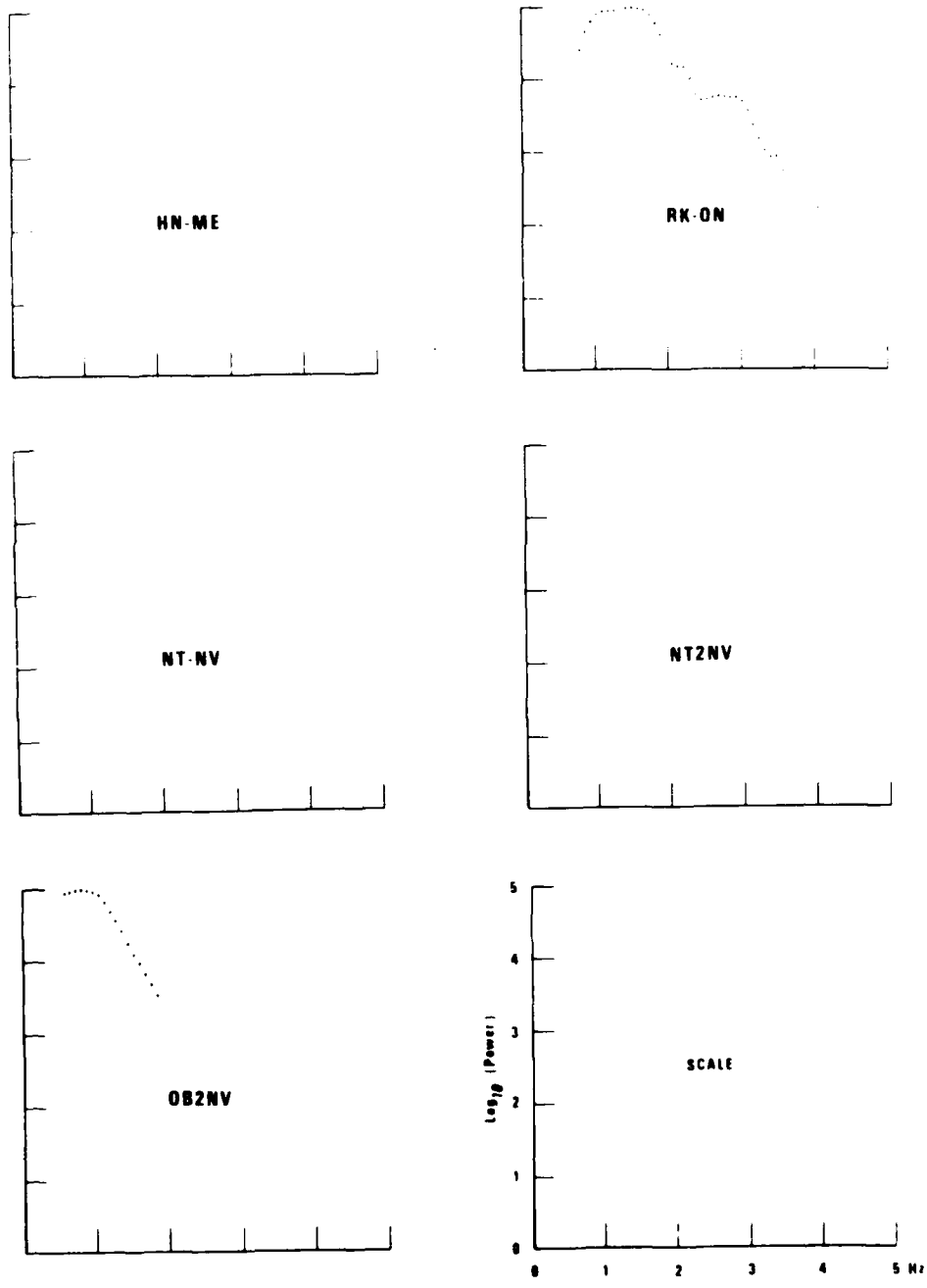



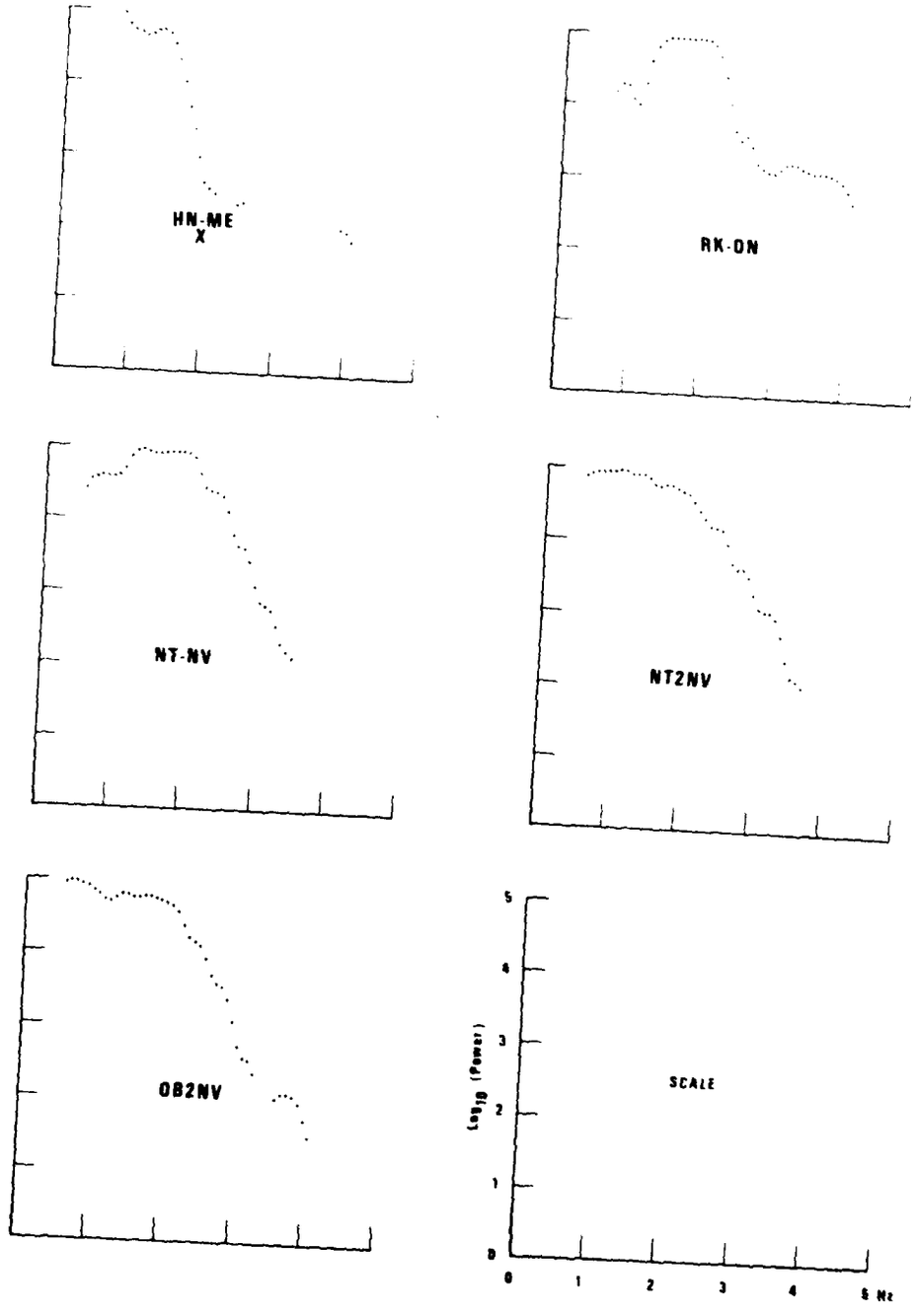



13 OCT 76
17:35:45.1
VENEZUELA
#40



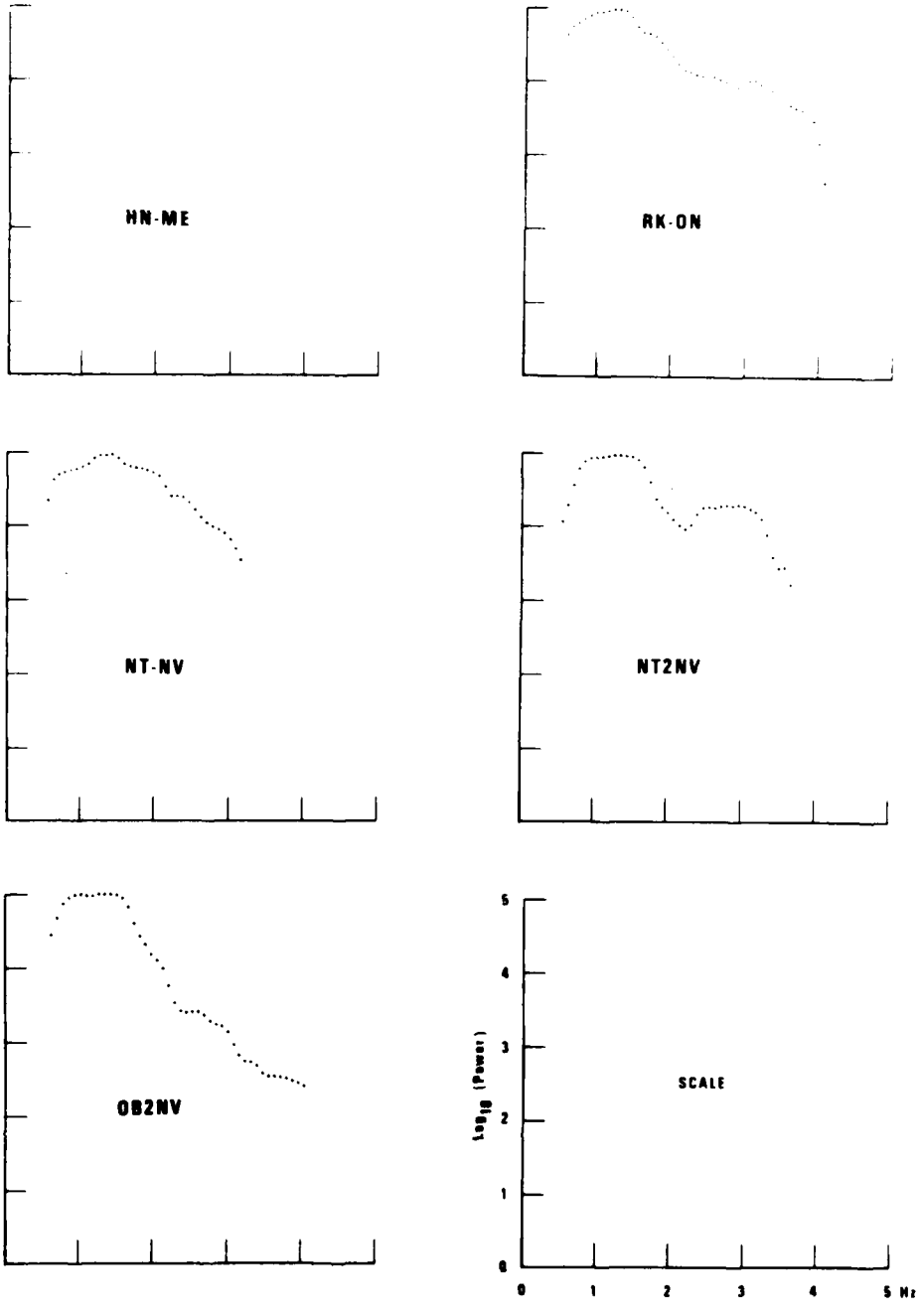
22 OCT 76
4:4:22.6
COAST OF NICARAGUA

#43

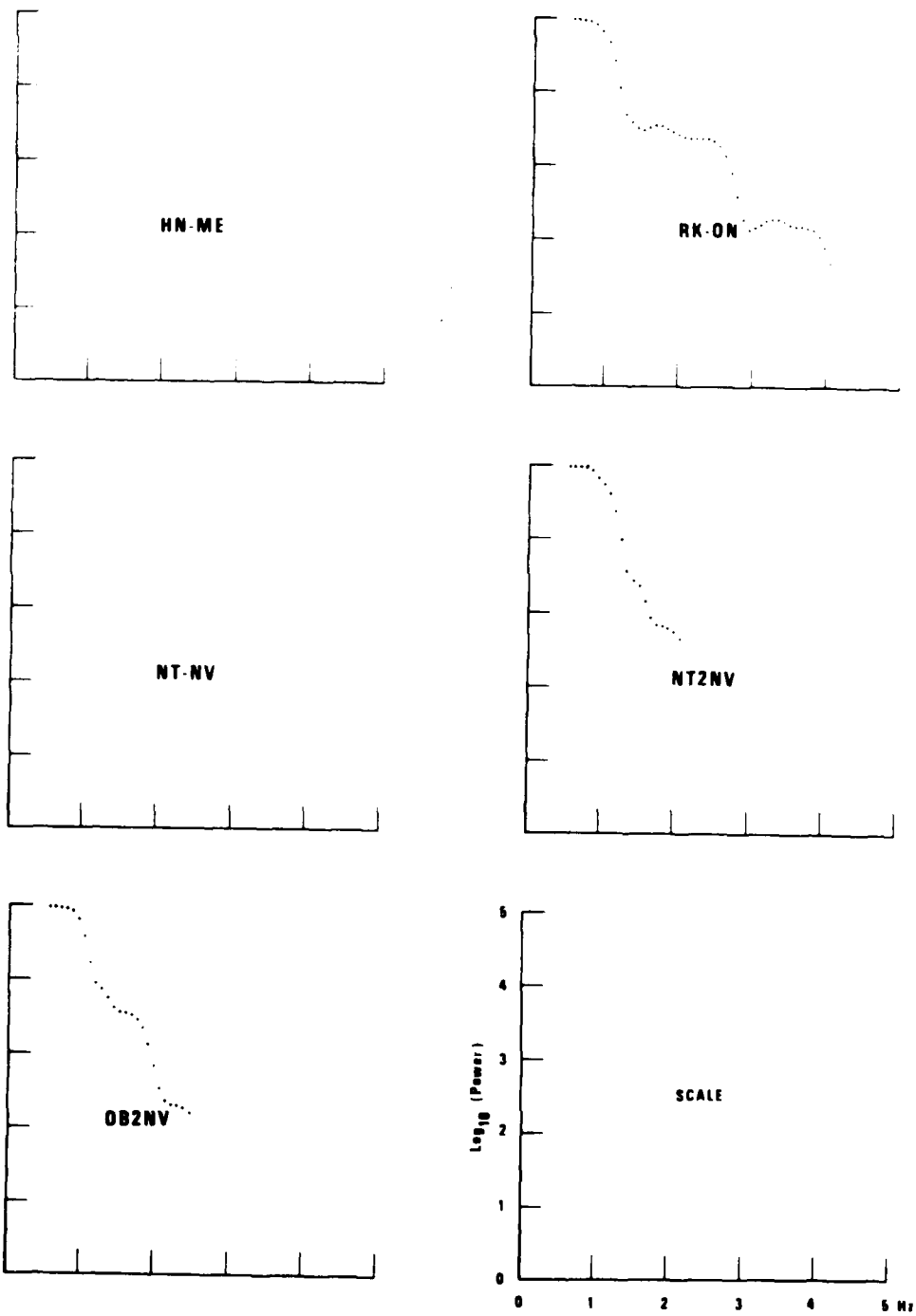


22 OCT 76
5:53:50.9
EL SALVADOR

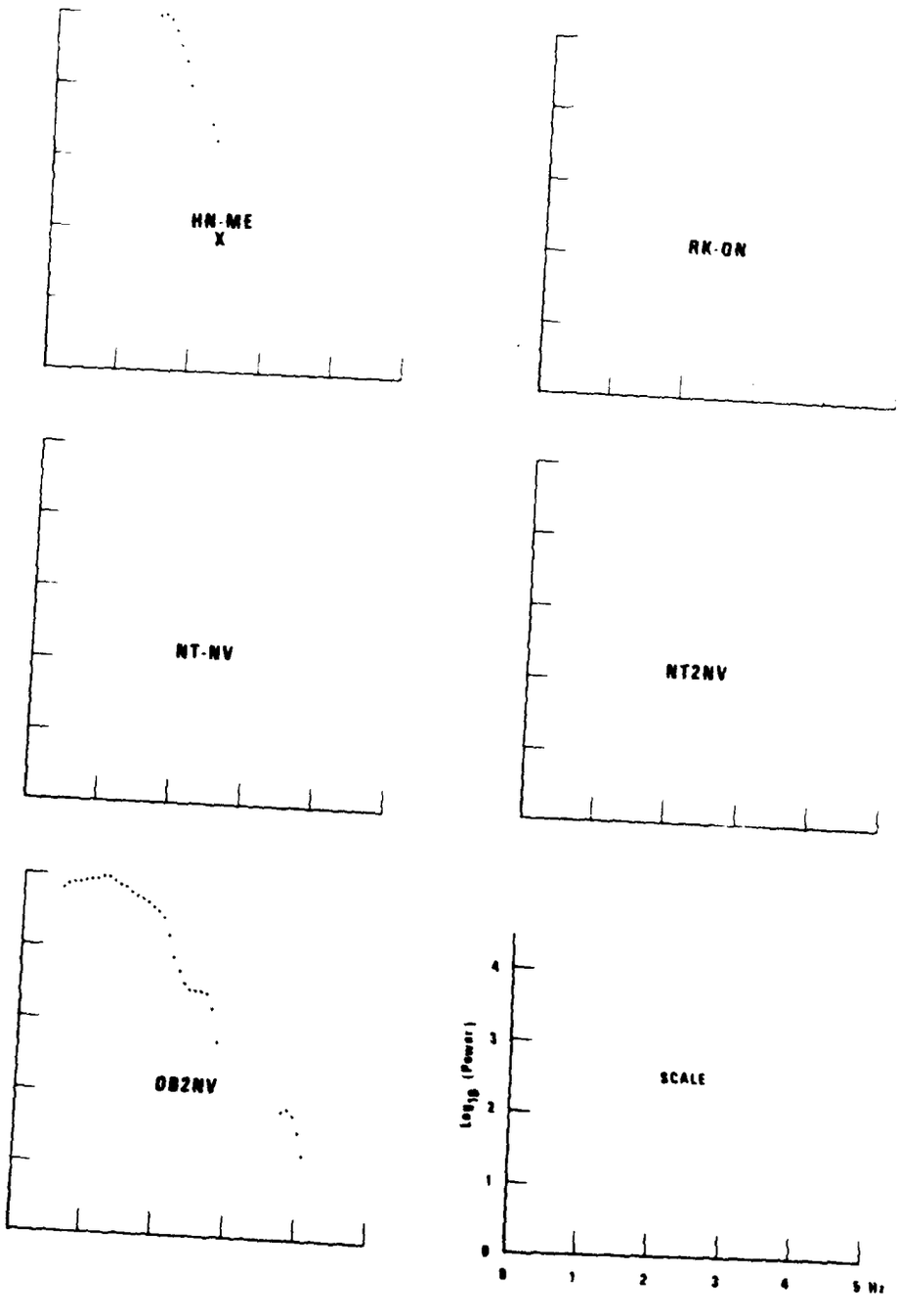
#44



22 OCT 76
18:35:23.9
KODIAK REGION
#45

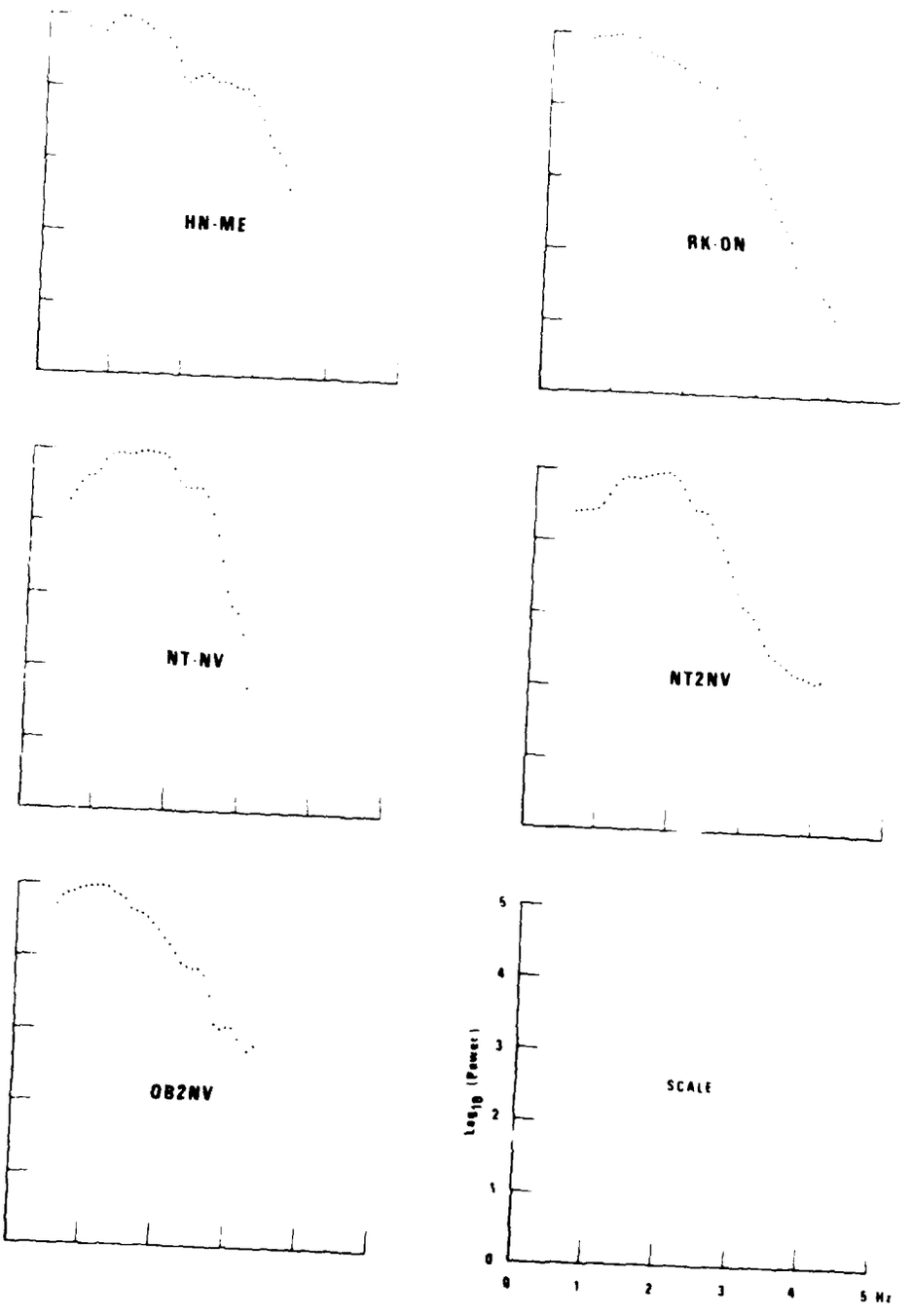


24 OCT 78
17:19:56.5
ALASKA
#46

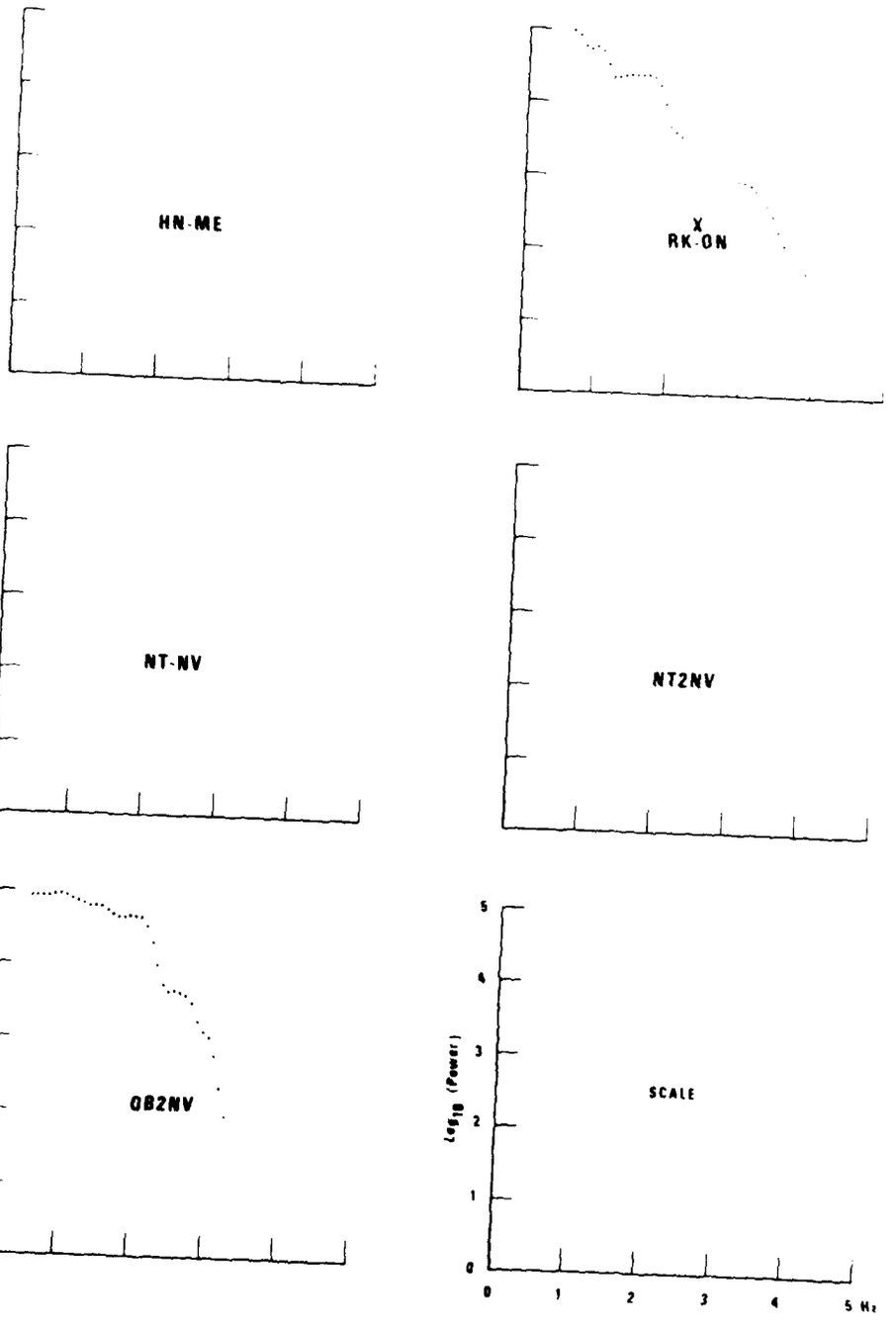


26 OCT 76
5:59:56.4
KURILES

#47

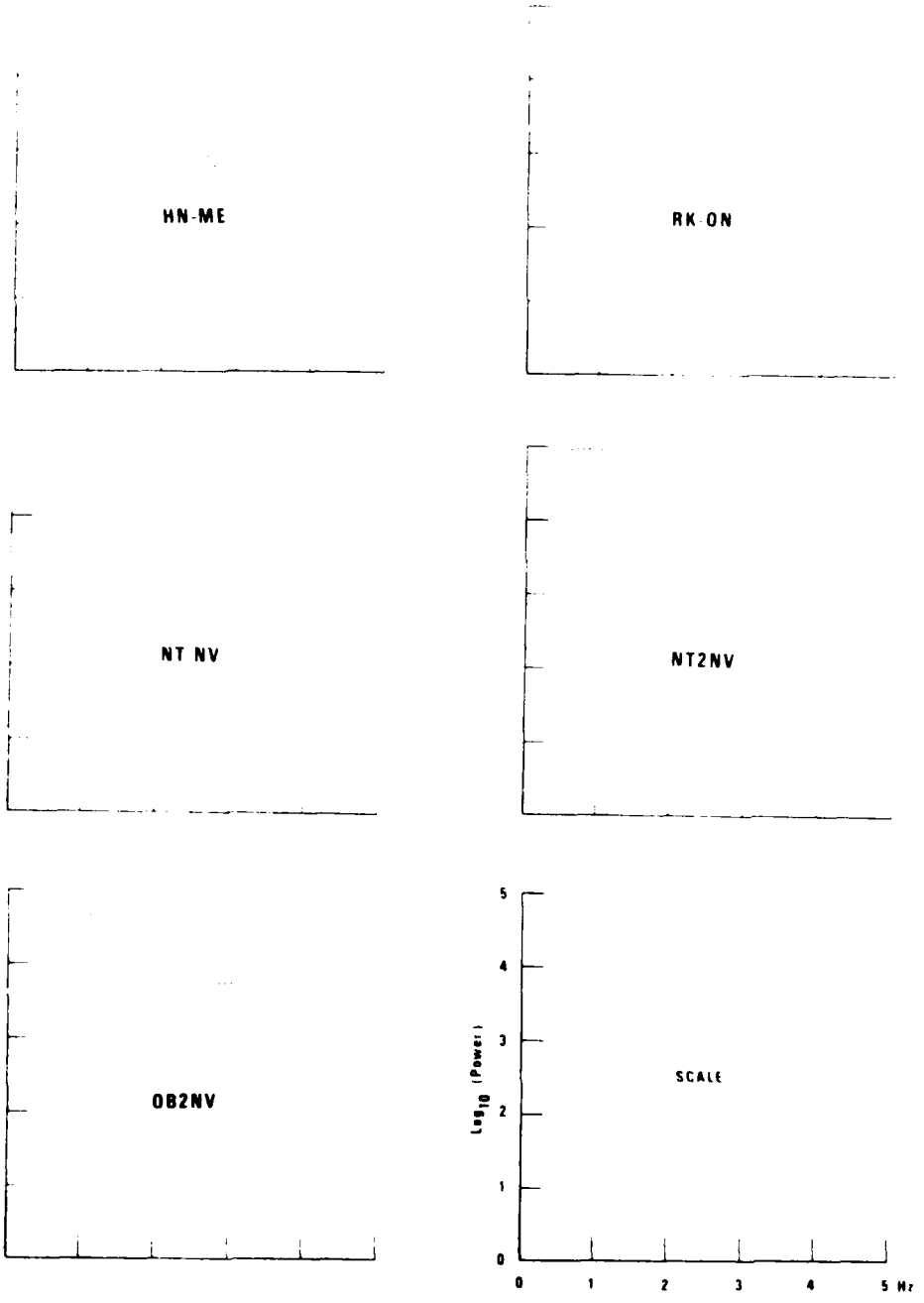


28 OCT 76
9:59:21.3
PERU
#48



**2 NOV 76**
**19:23:2.7**
**KURILES**

#49



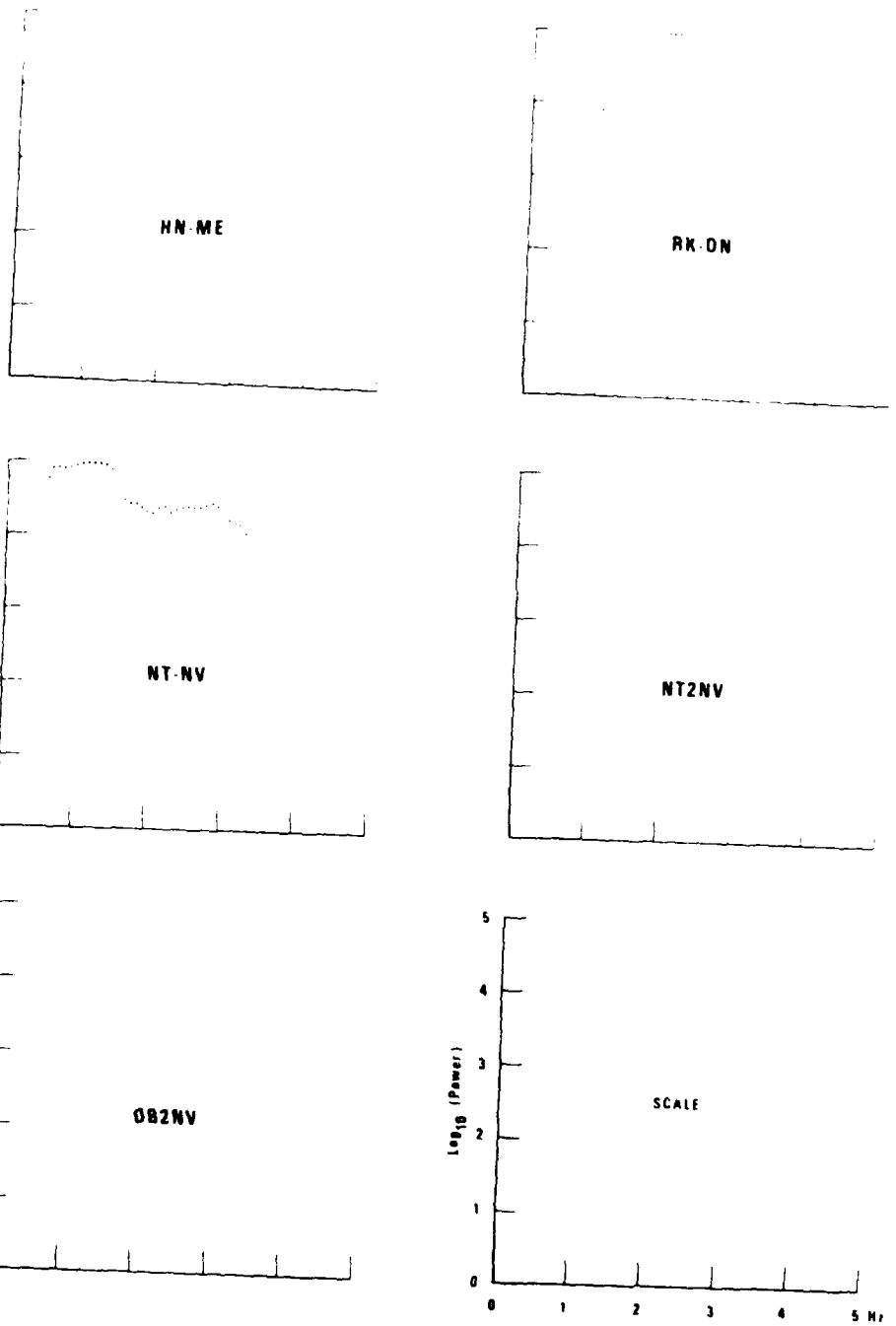
15 NOV 76
14:14:28.6
KURILES
#51

22 NOV 76

20:9:27

VENEZUELA

#53

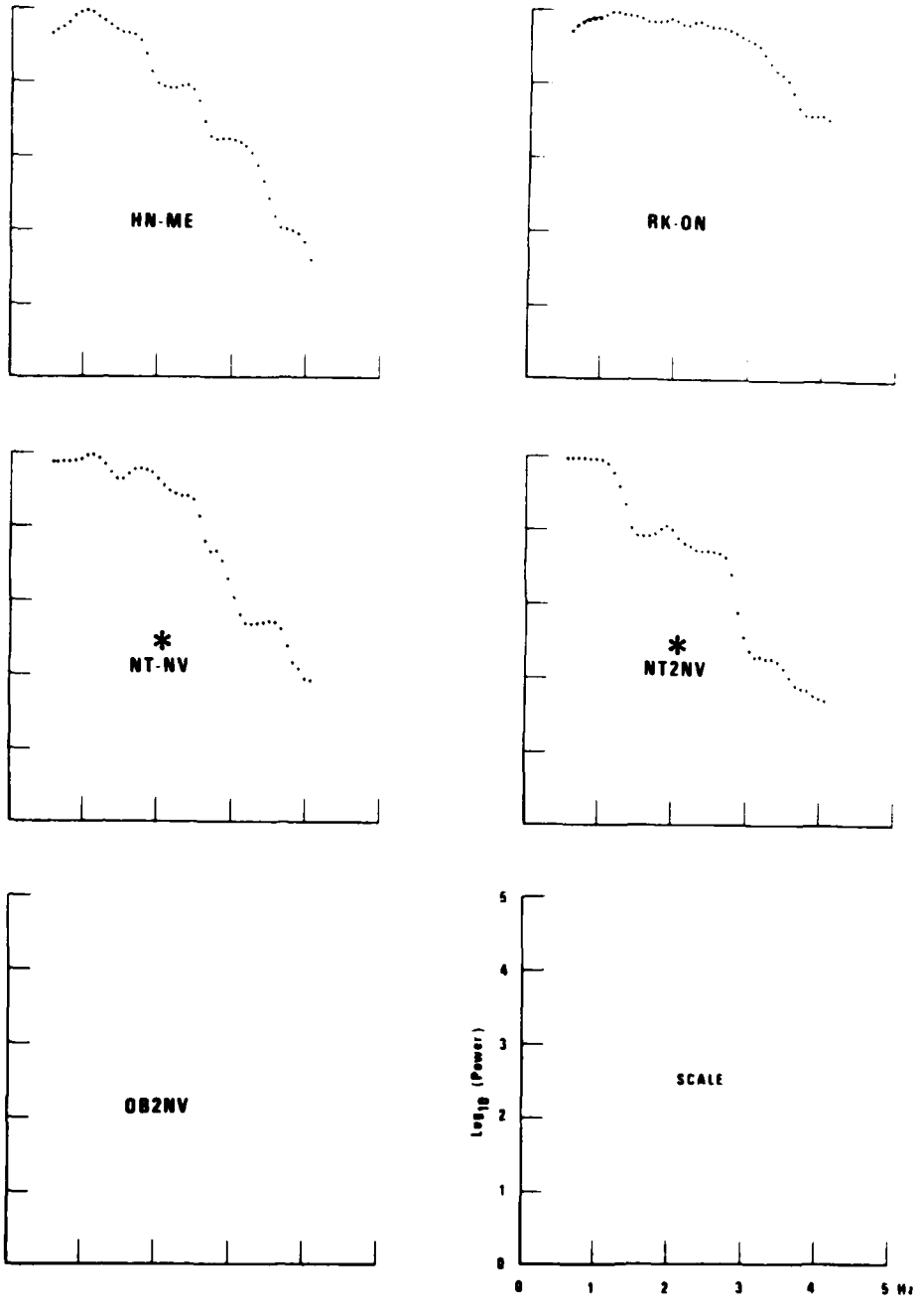


23 NOV 76

5:3:0.0

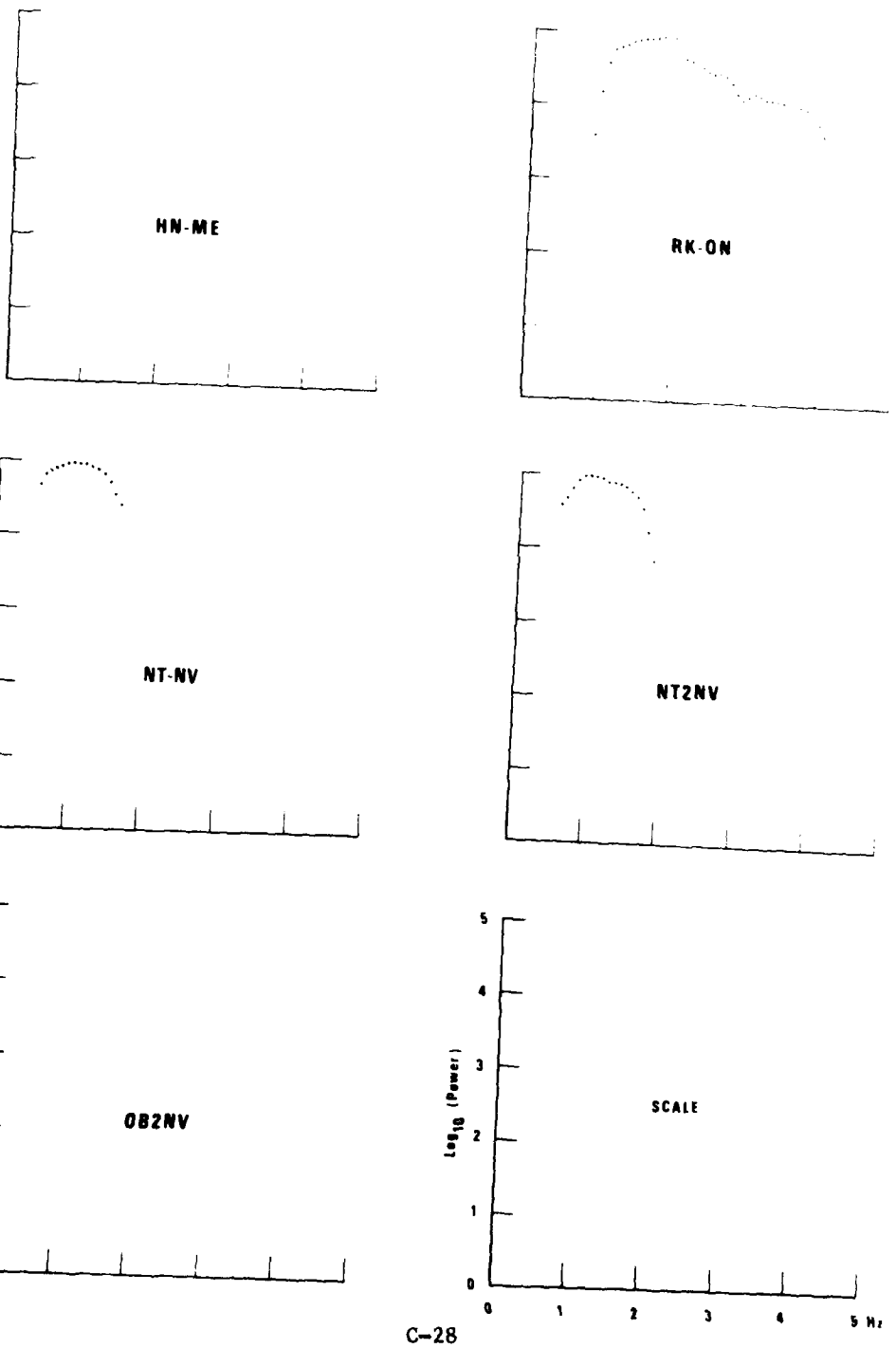
EAST KAZAKH

#27



26 NOV 76
23:43:12.6
PERU-ECUADOR BORDER

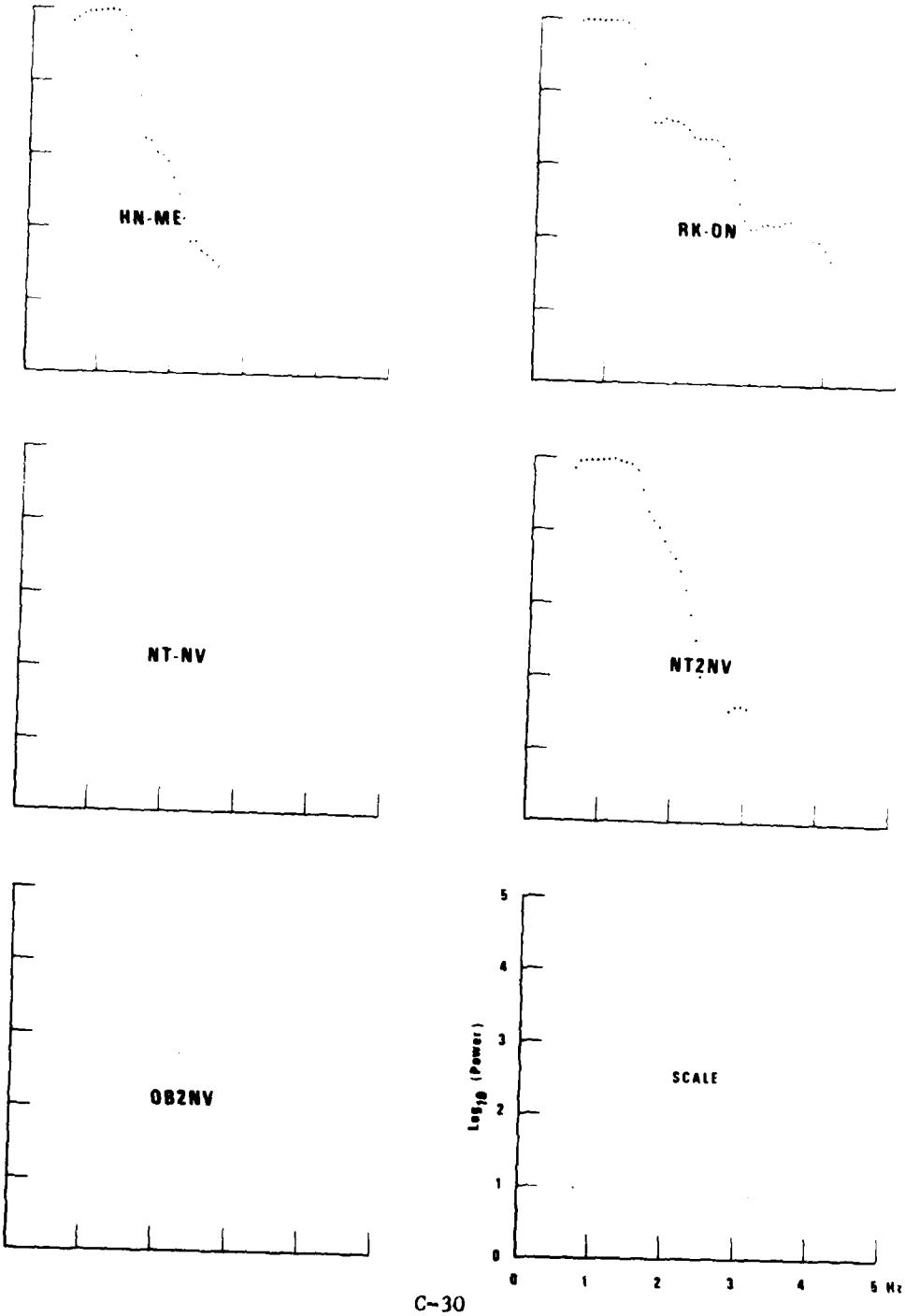
#54



30 NOV 78
0:40:57.0
CHILE-BOLIVA BORDER

#59

1 DEC 76
14:15:33.2
COSTA RICA
#55



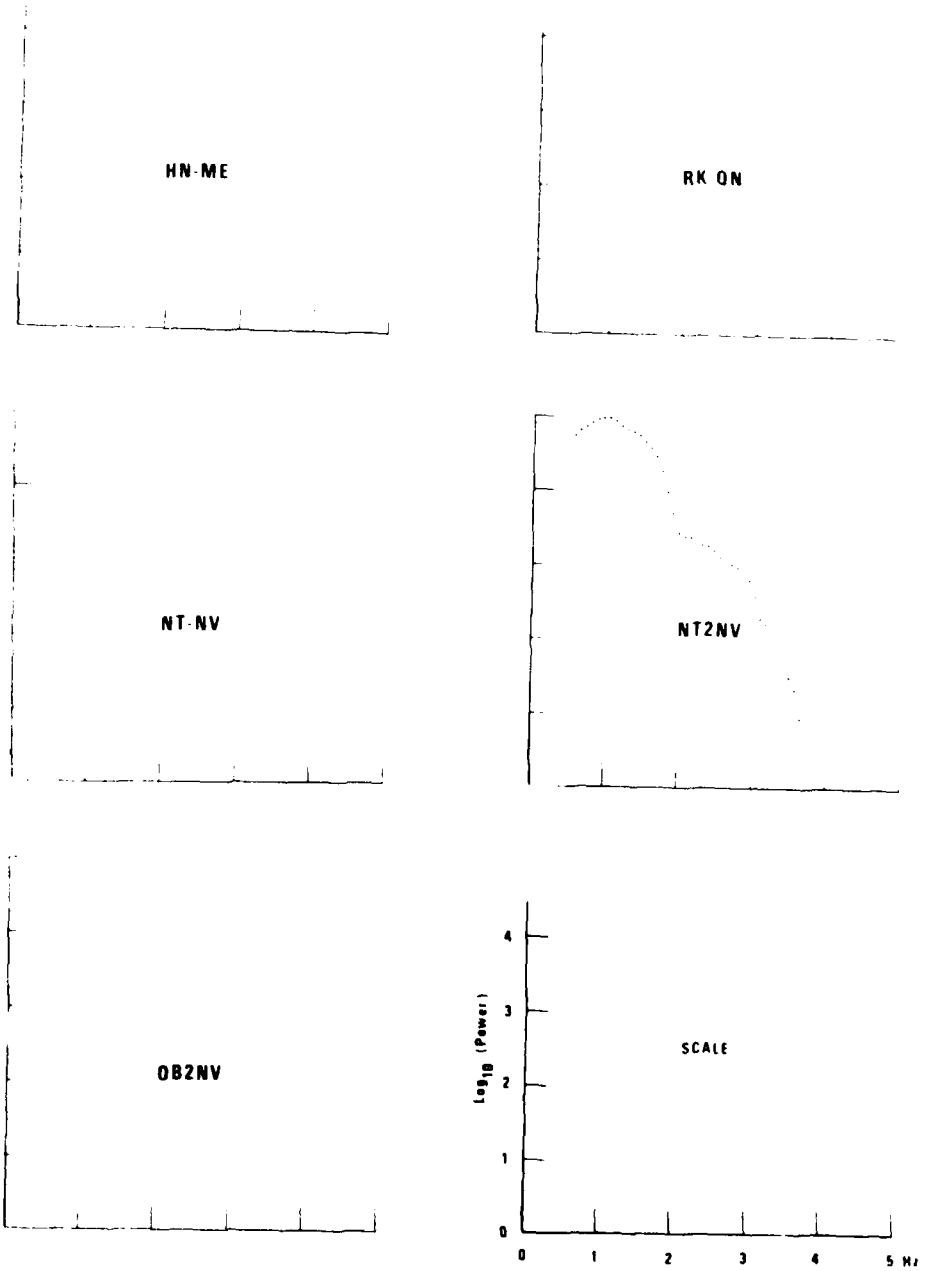
1 DEC 78

17:44:33.8

COAST OF CEN. AMERICA

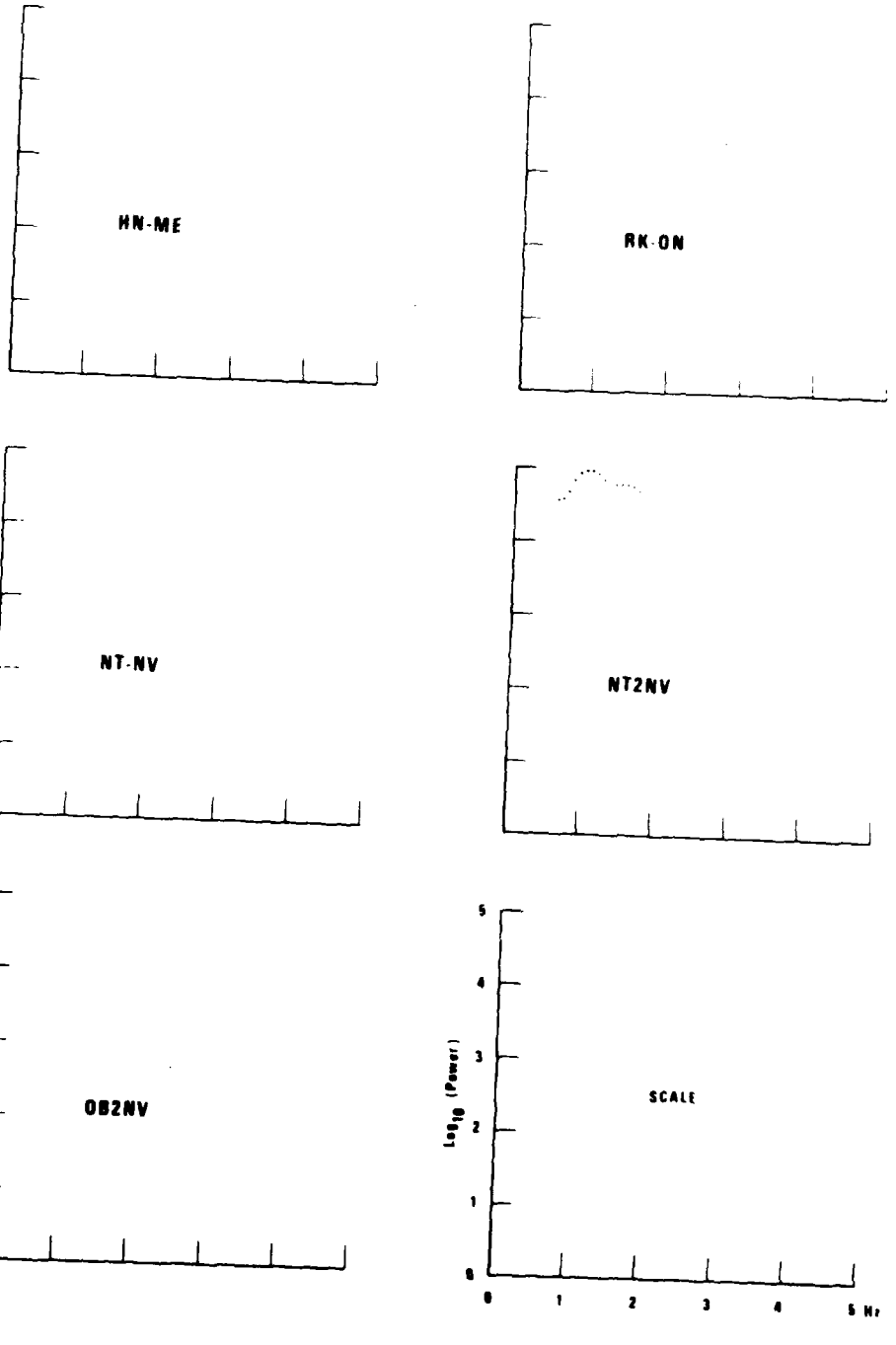
#56

3 DEC 76
5:27:34.4
CHILE-BOLIVA BORDER
#57

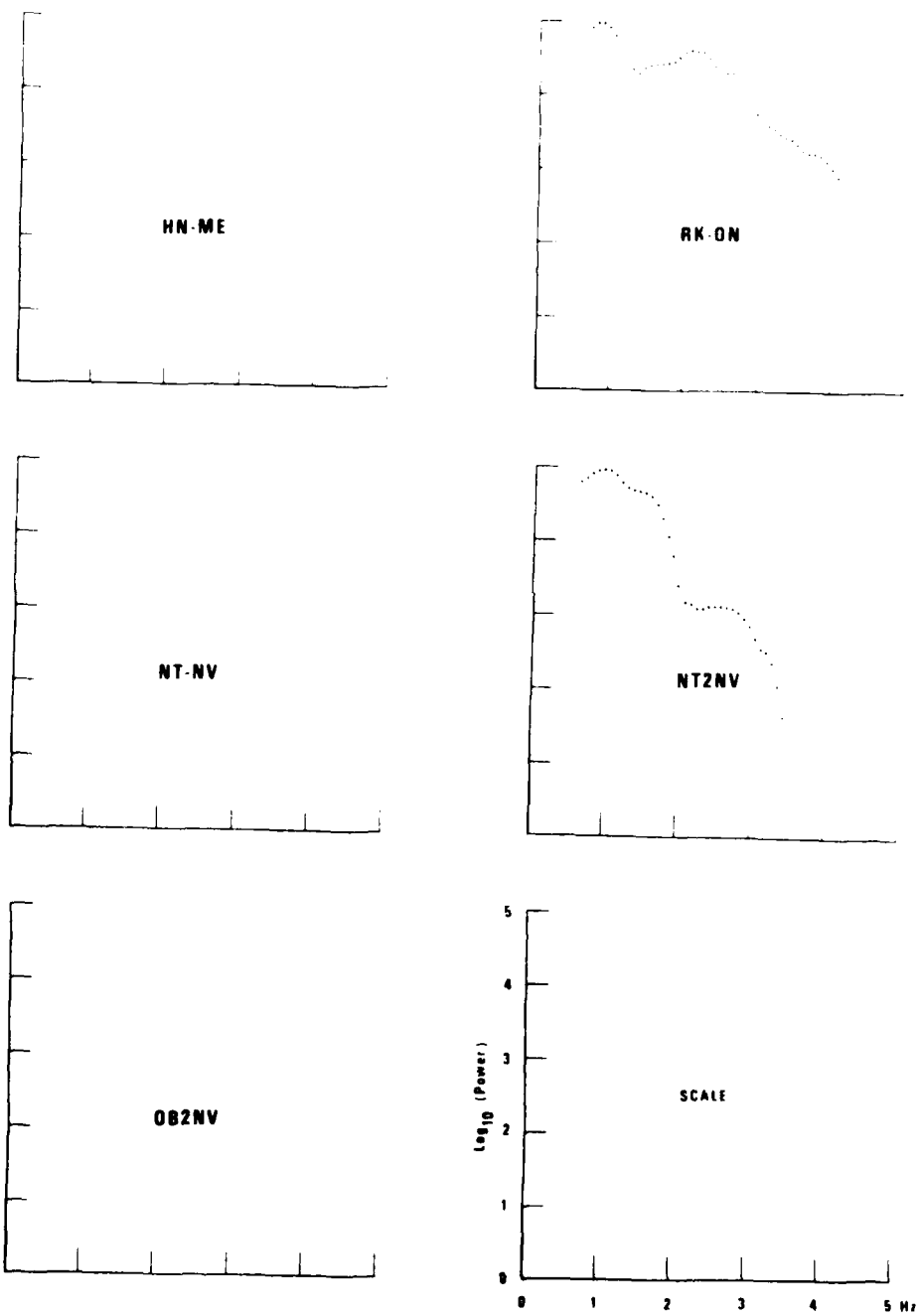


3 DEC 76
23:10:23.1
N. CHILE

#58

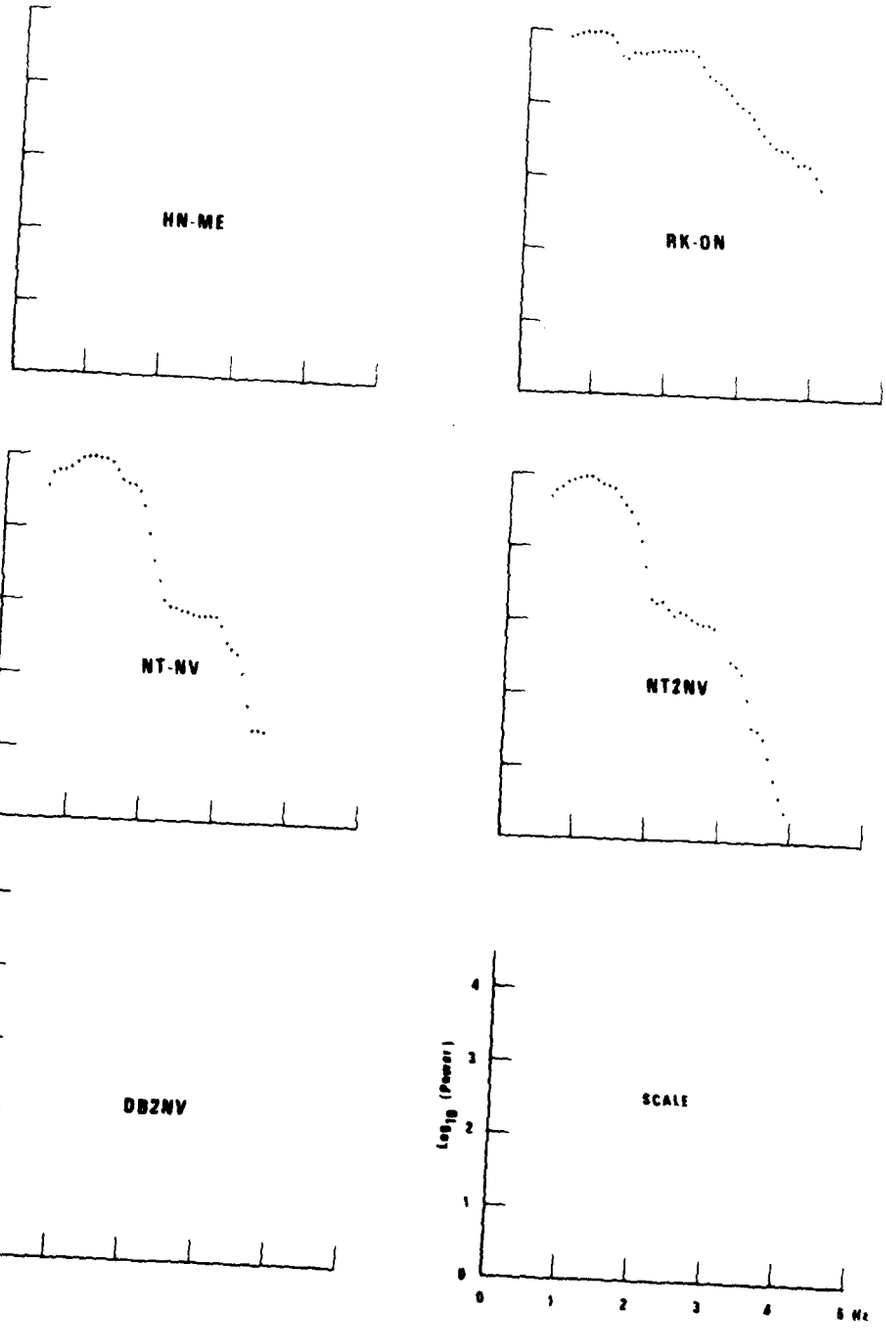


4 DEC 76
5:6:29.7
N CHILE
#60



4 DEC 76
12:32:36.4
N. CHILE

#61

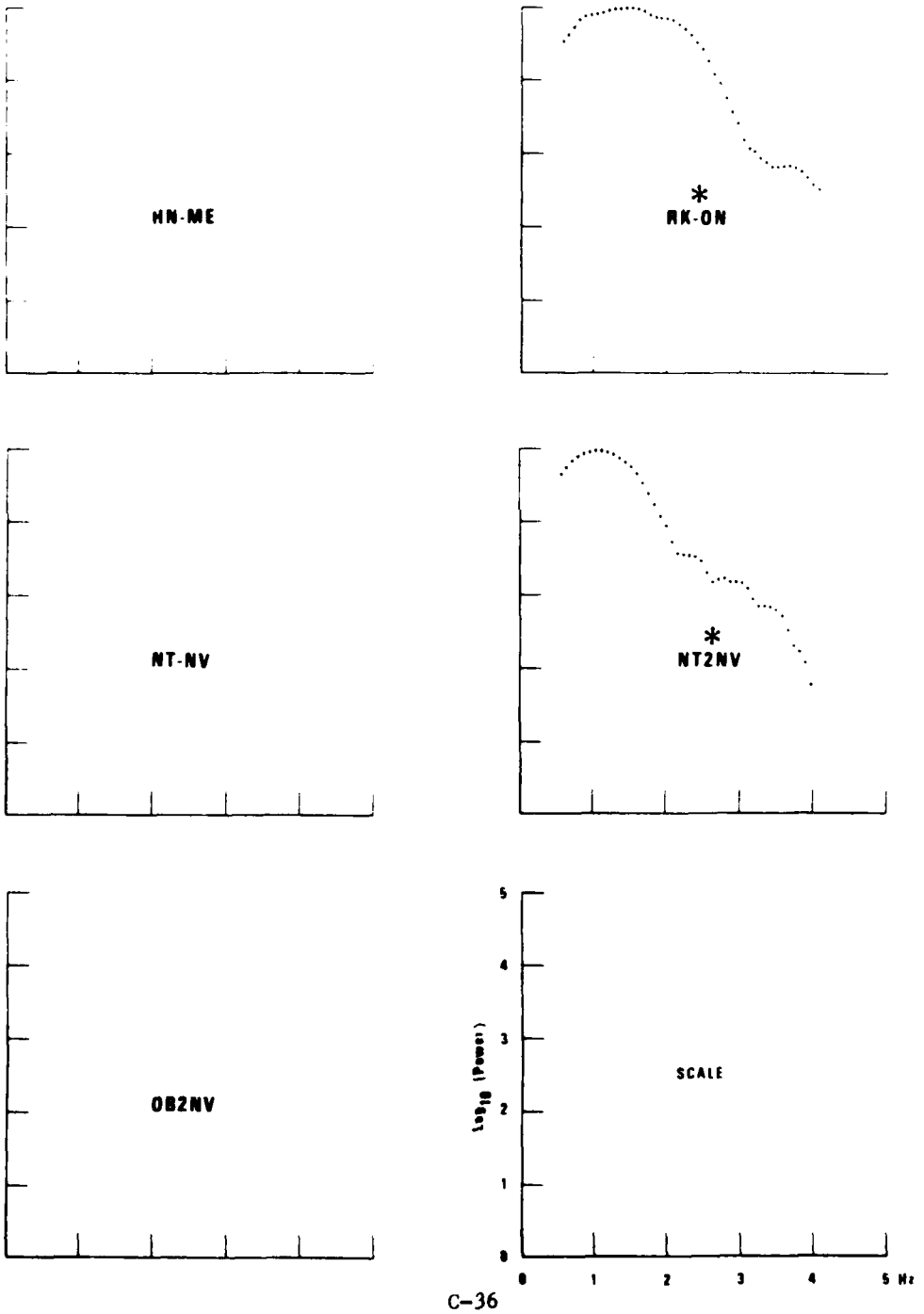


5 DEC 76

22.1.22.1

BONIN ISLAND

#62

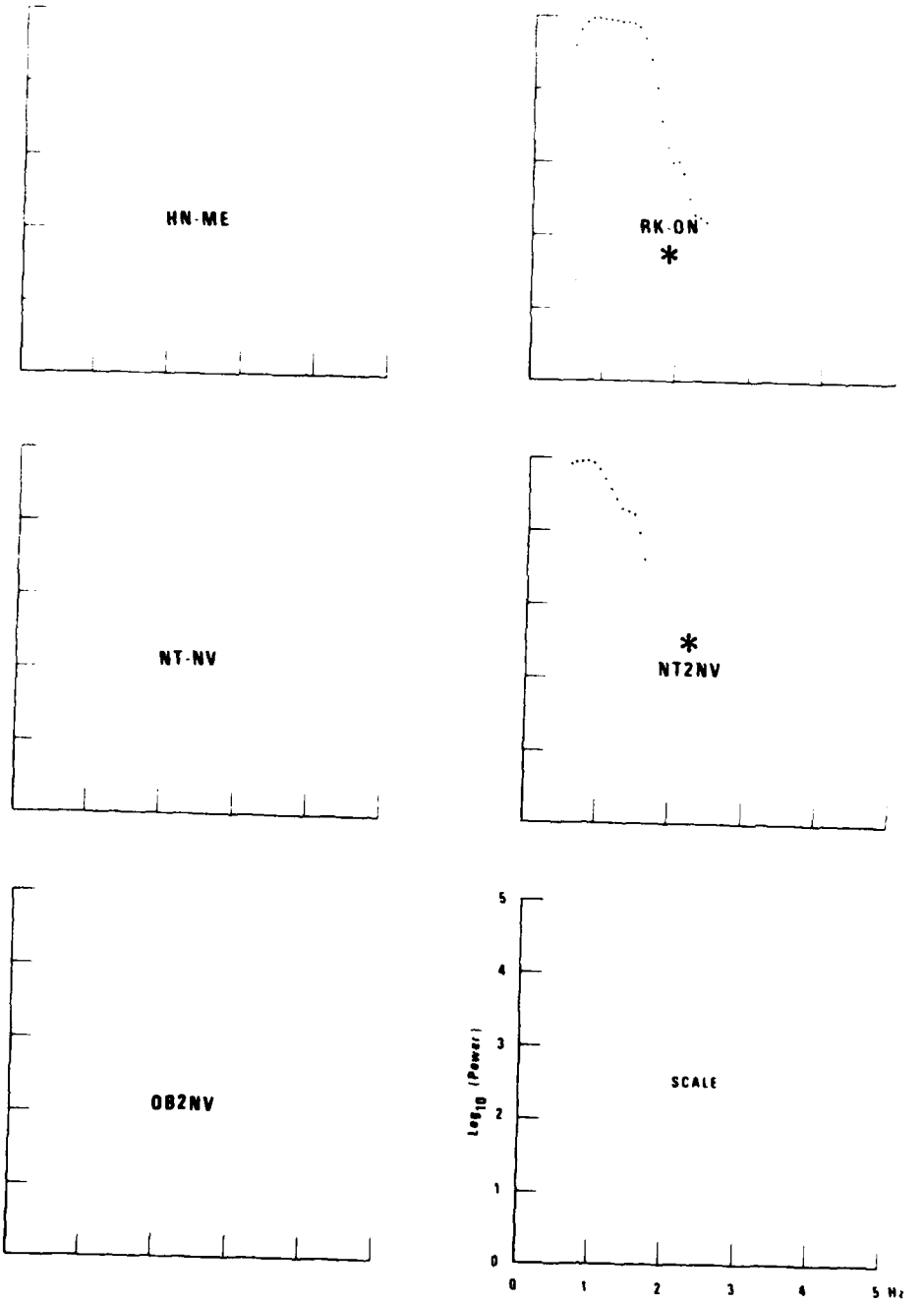


6 DEC 76

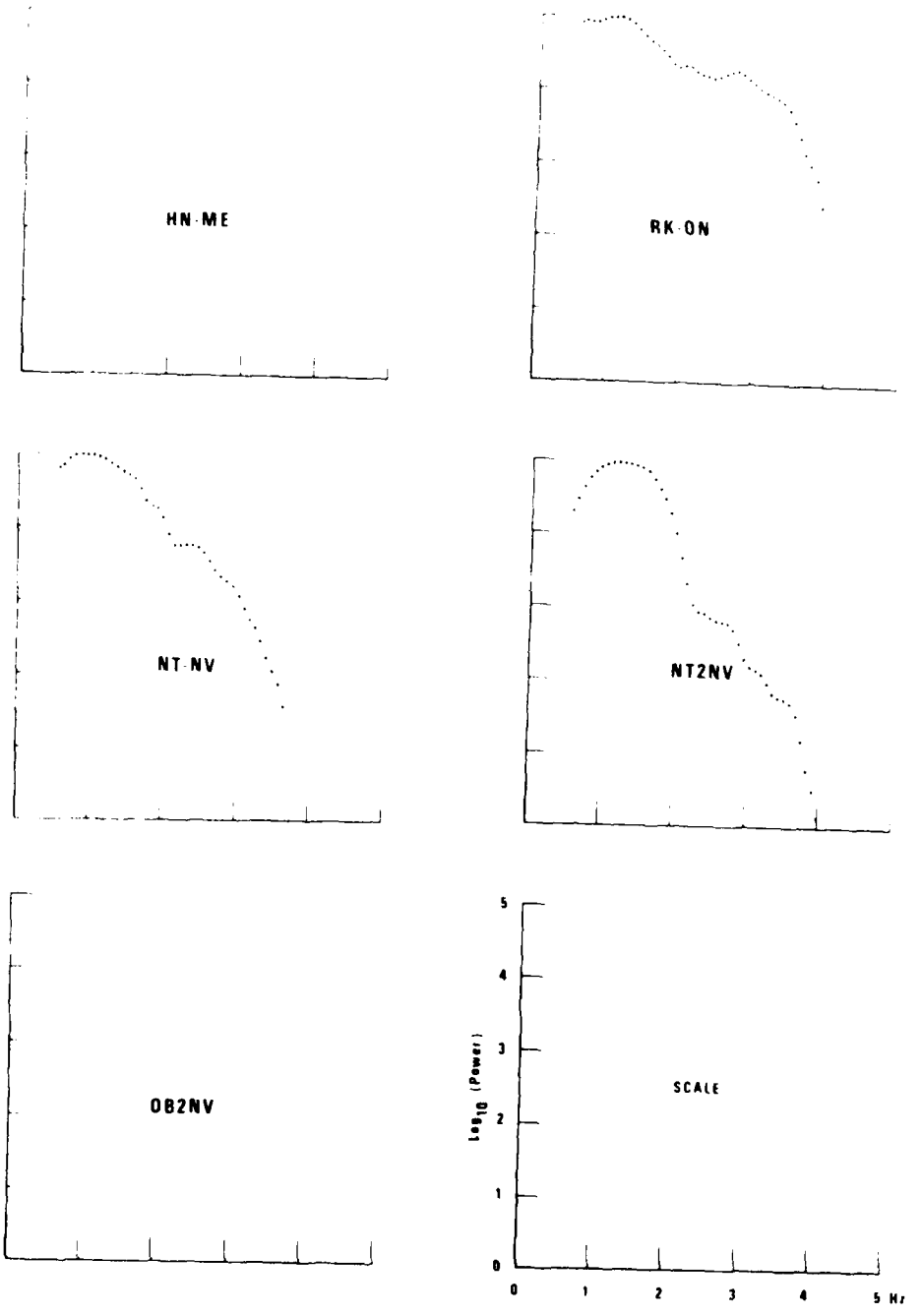
19:46:2.4

EASTER ISLAND

#63

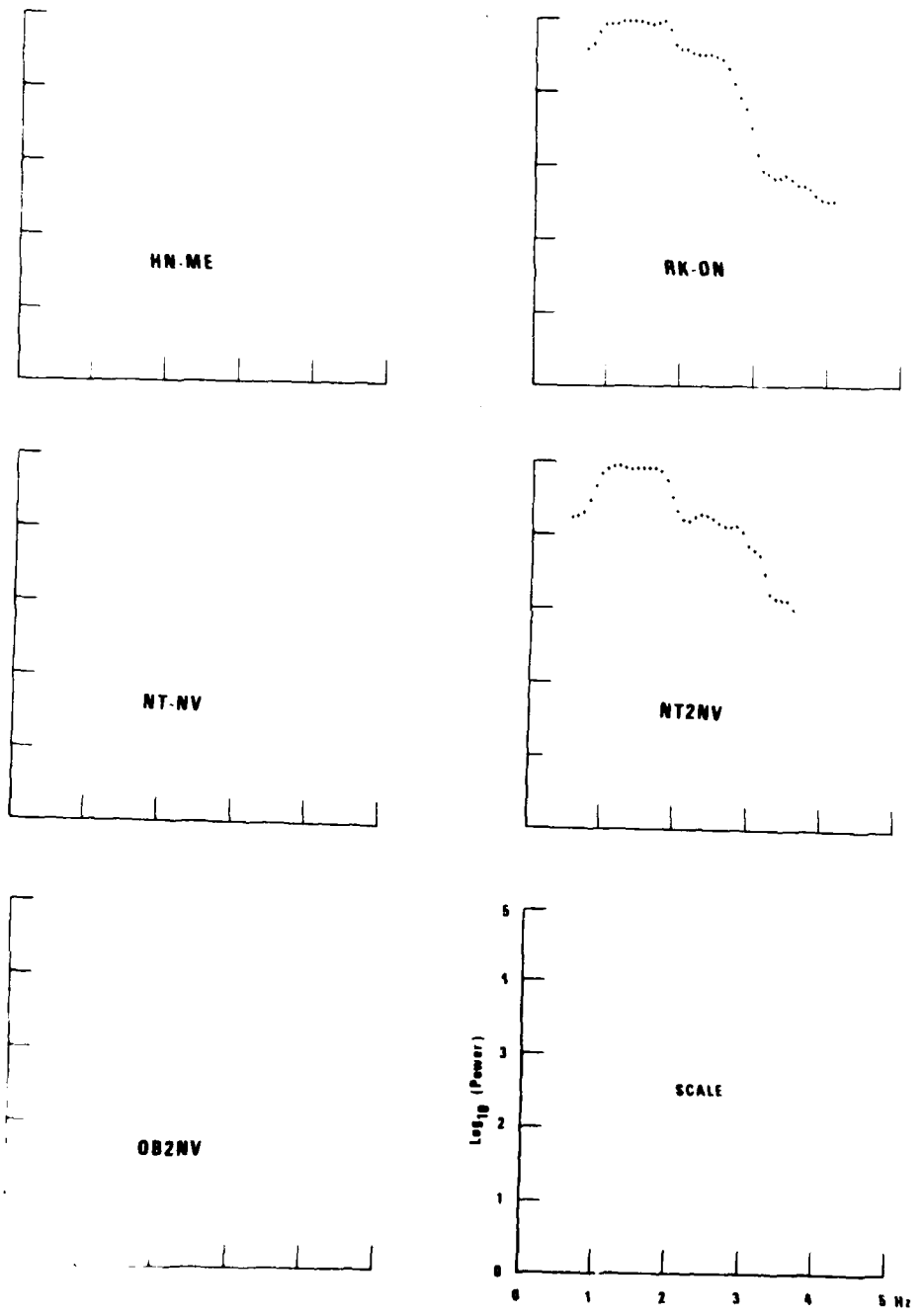


7 DEC 76
9 36 41.4
S. HONSHU
#64



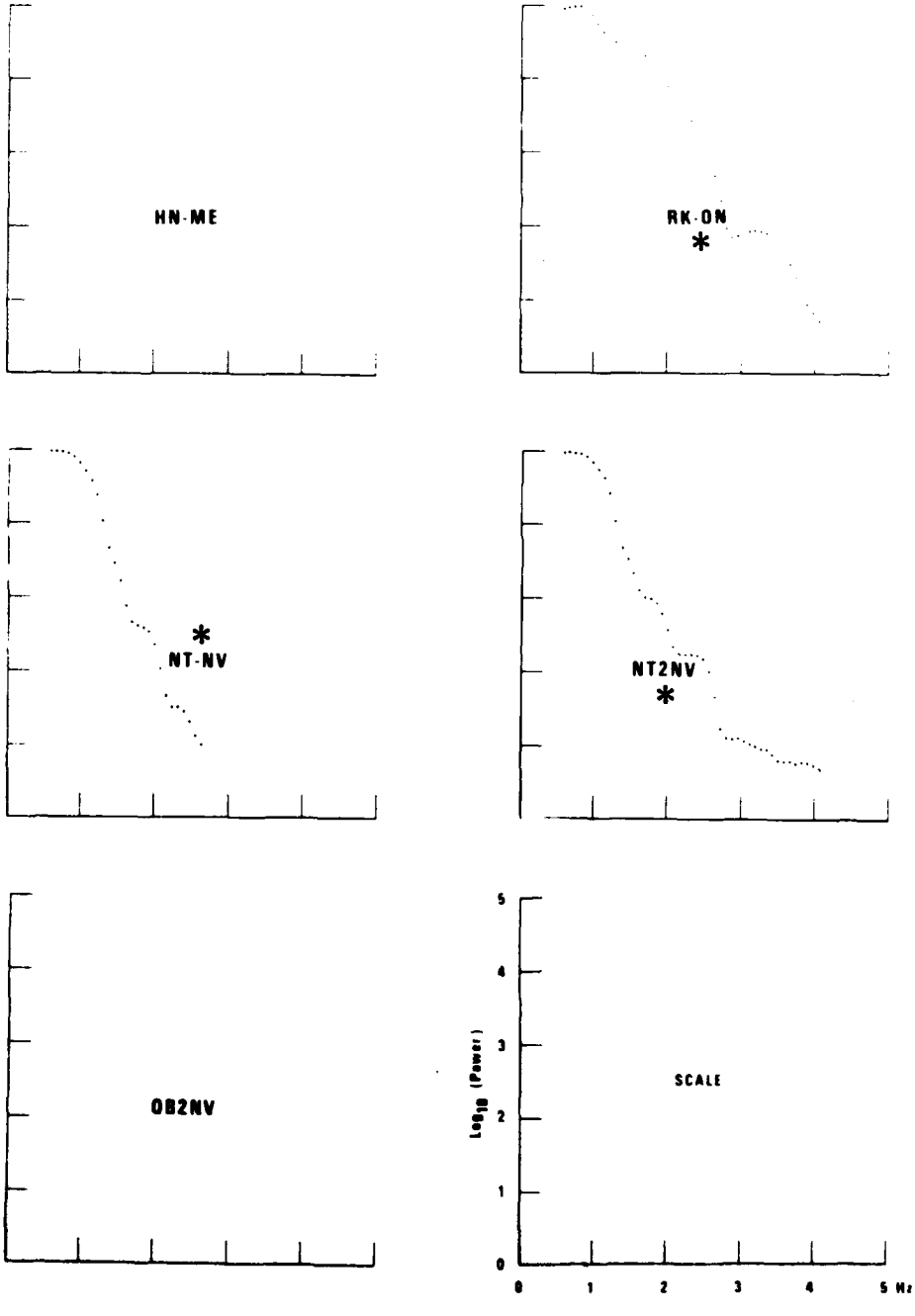
13 DEC 78
23:1:28.0
N.PACIFIC

#75

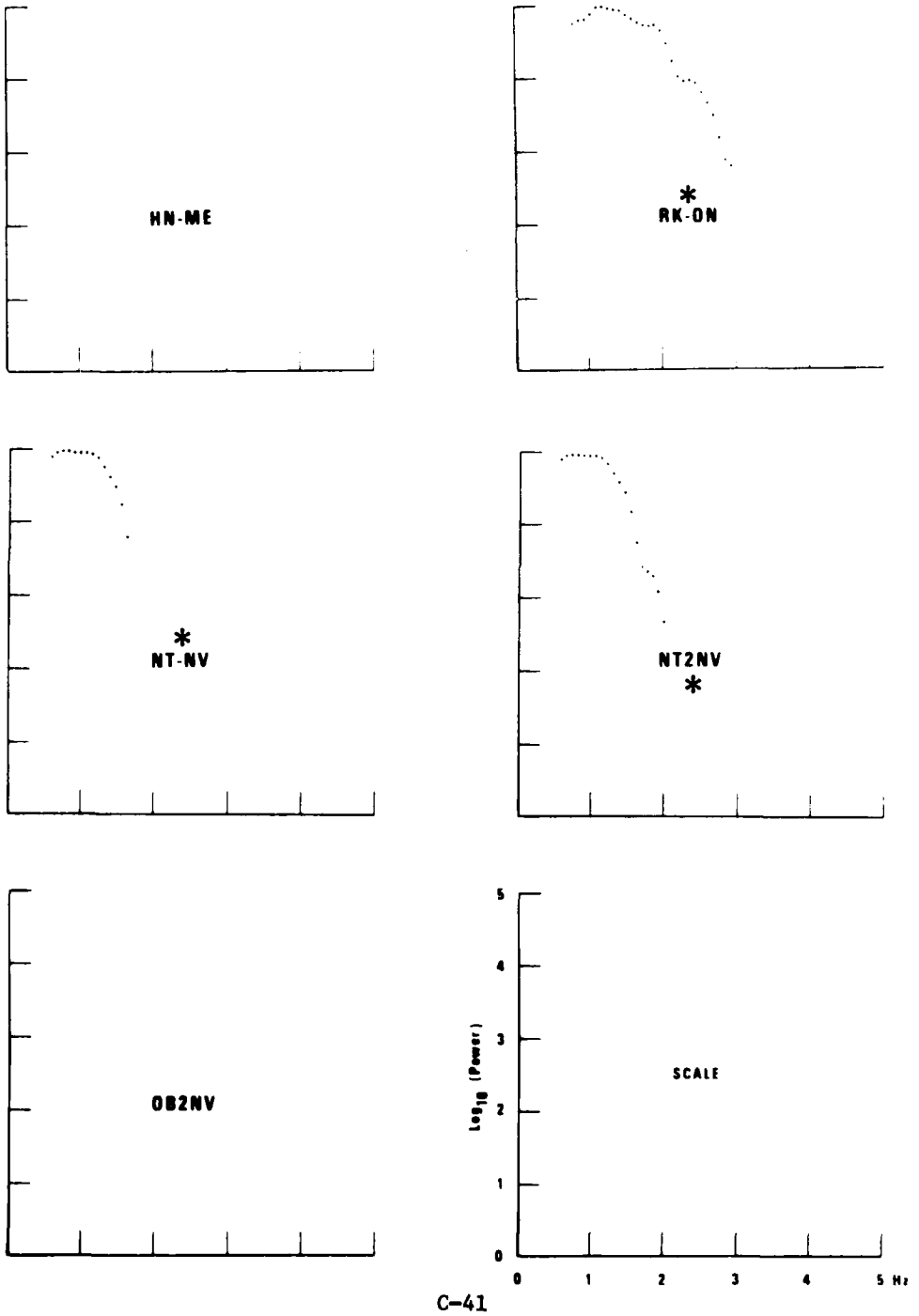


14 DEC 76
16:6:56.0
JAPAN

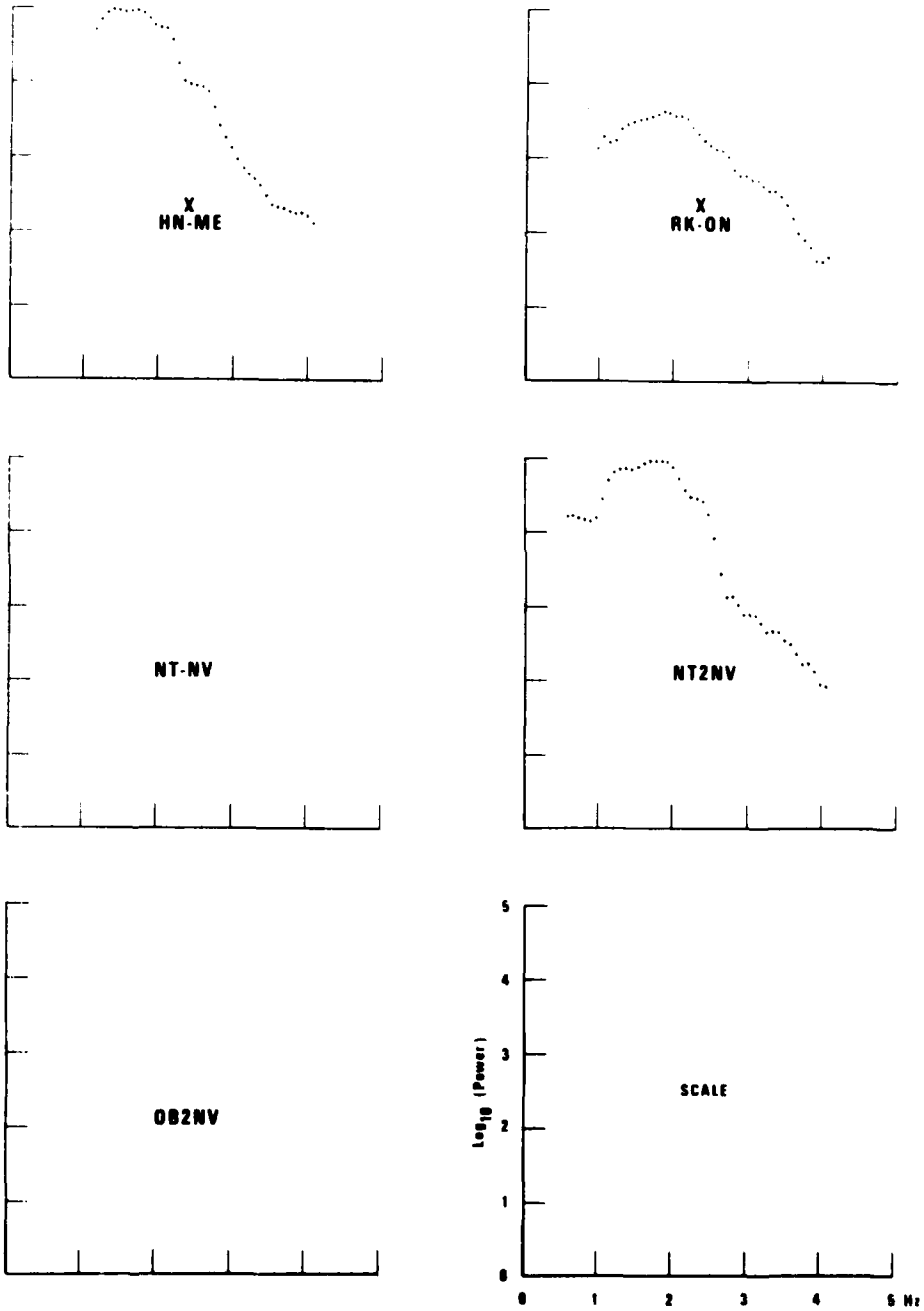
#76



15 DEC 76
12:28:4.0
JAPAN
#71



19 DEC 76
14:37:30.0
KURILES
#69

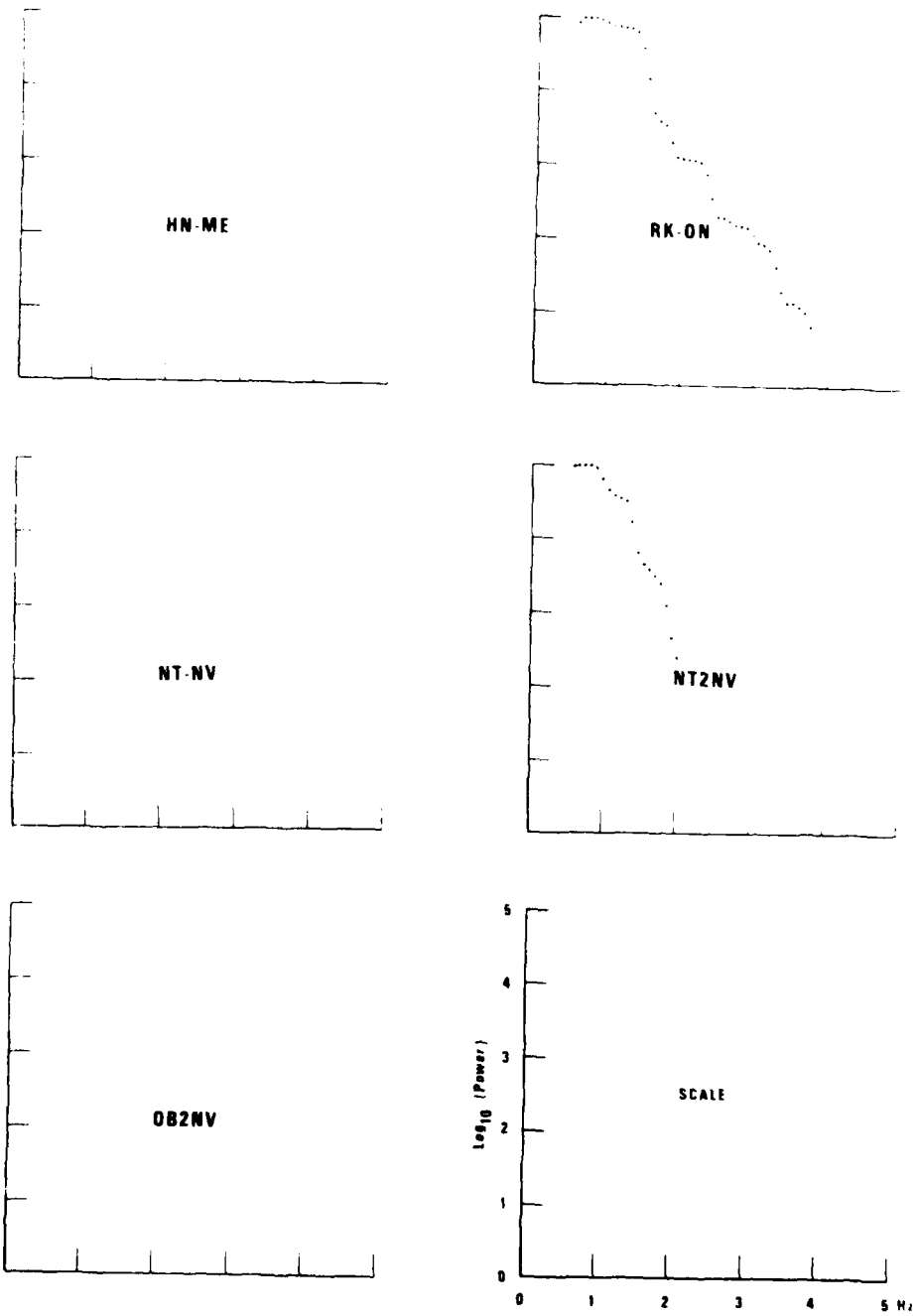


20 DEC 76
10:18:58.0
COLUMBIA

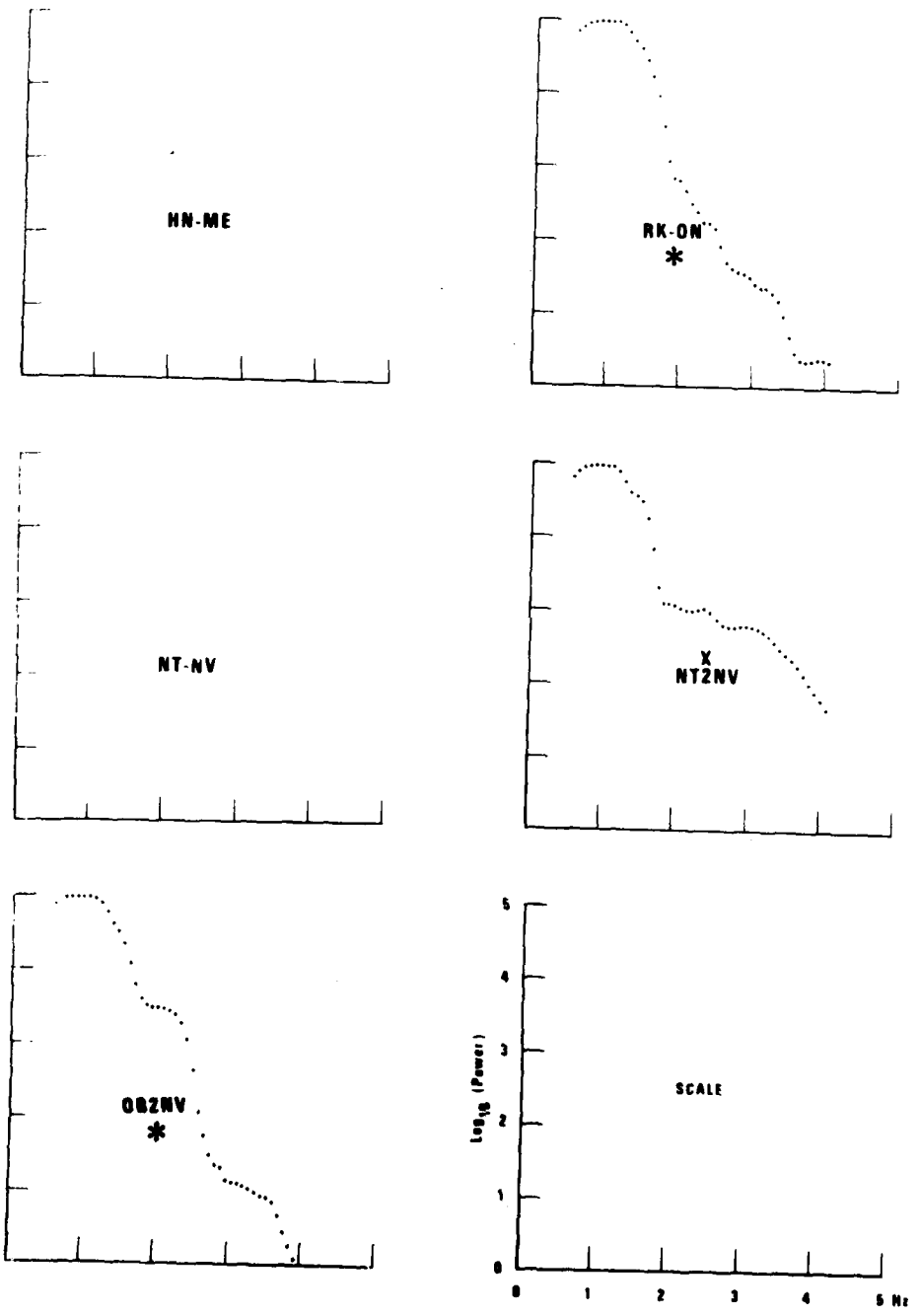
#70

20 DEC 76
21:22:25.0
BR. COLUMBIA

#73

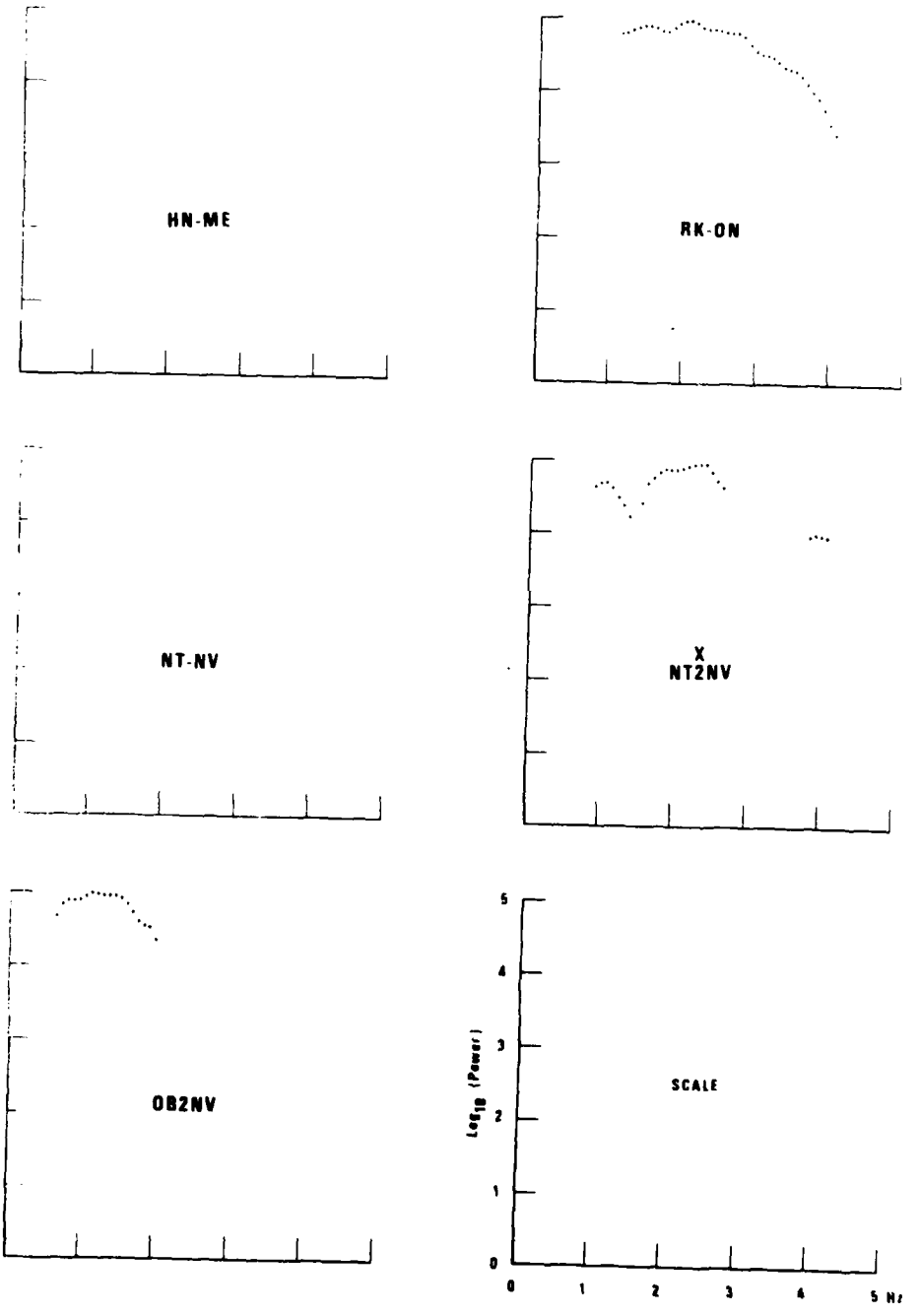


22 DEC 76
1:1:42.0
VOLCANO IS.
#74

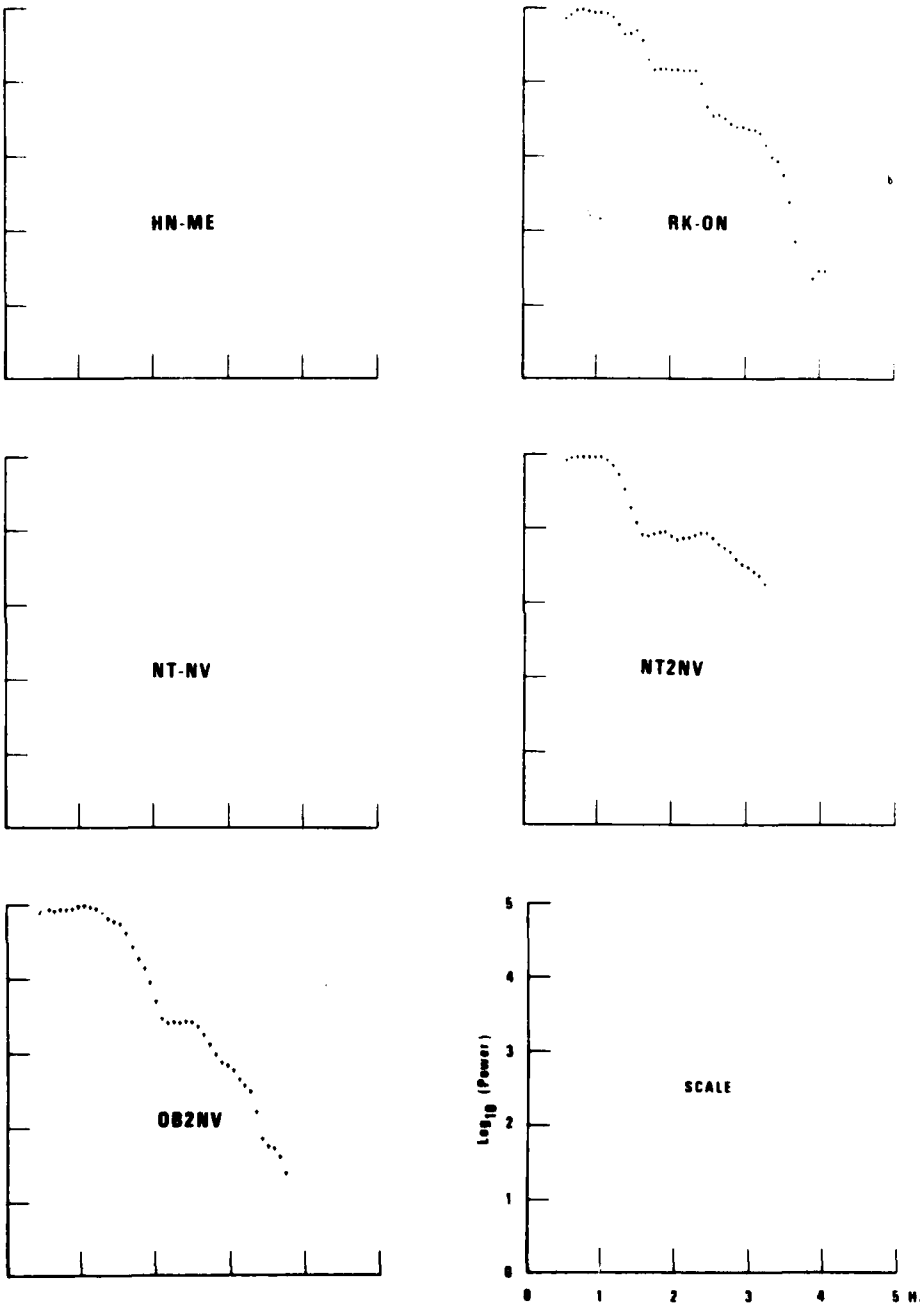


27 DEC 76
18:8:8.0
JAPAN

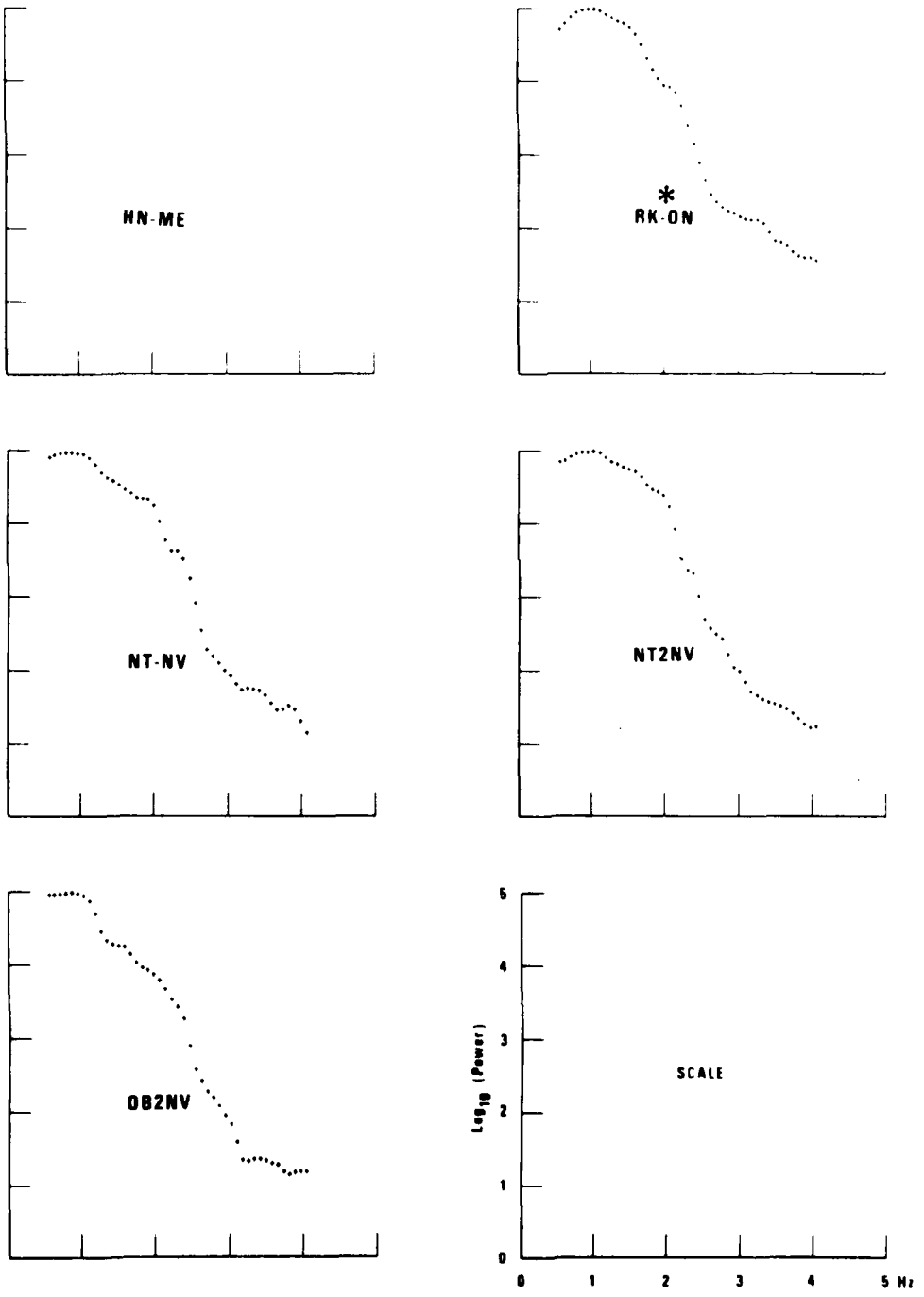
#77



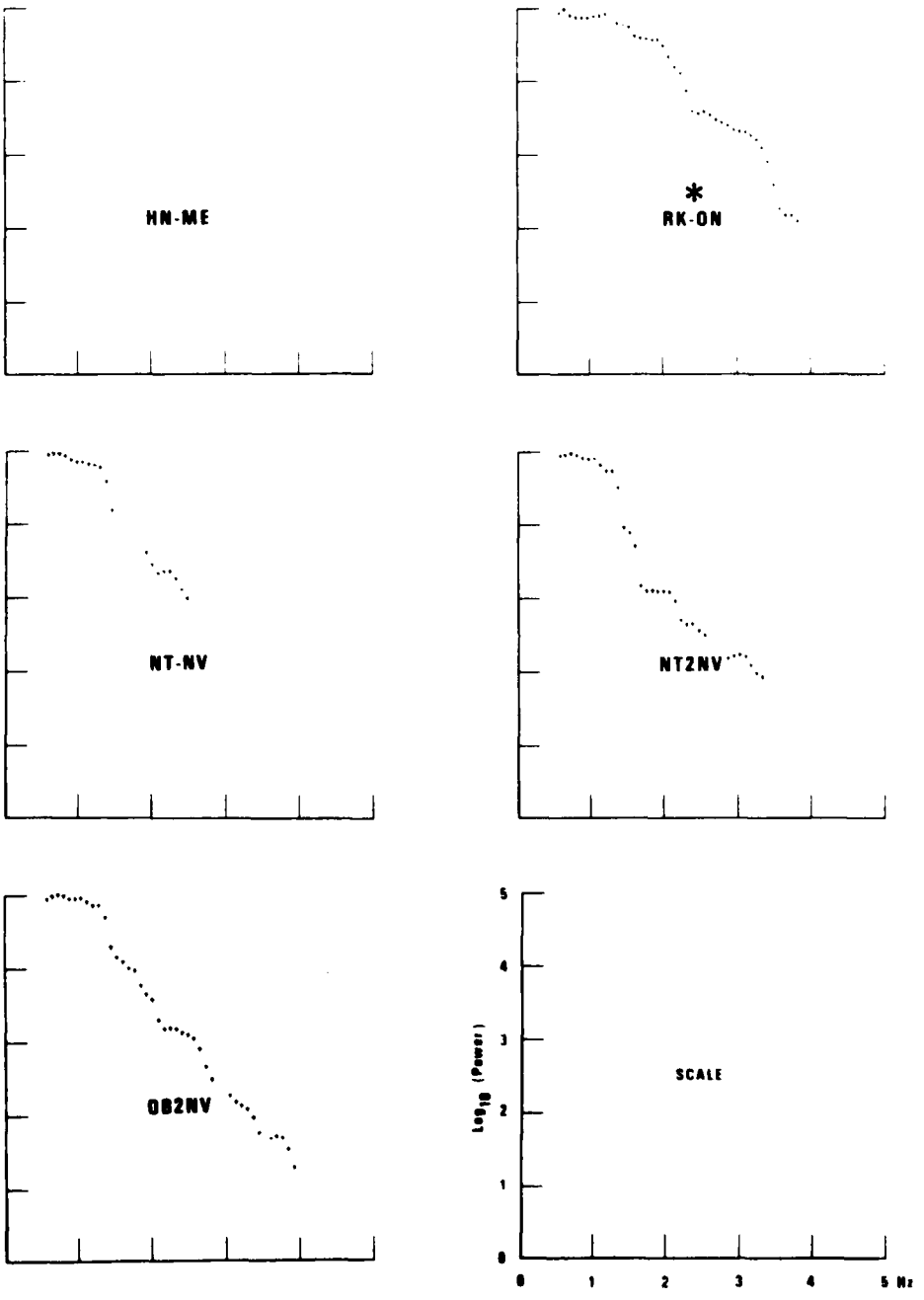
31 DEC 76
9:16:37.0
JAPAN
#79



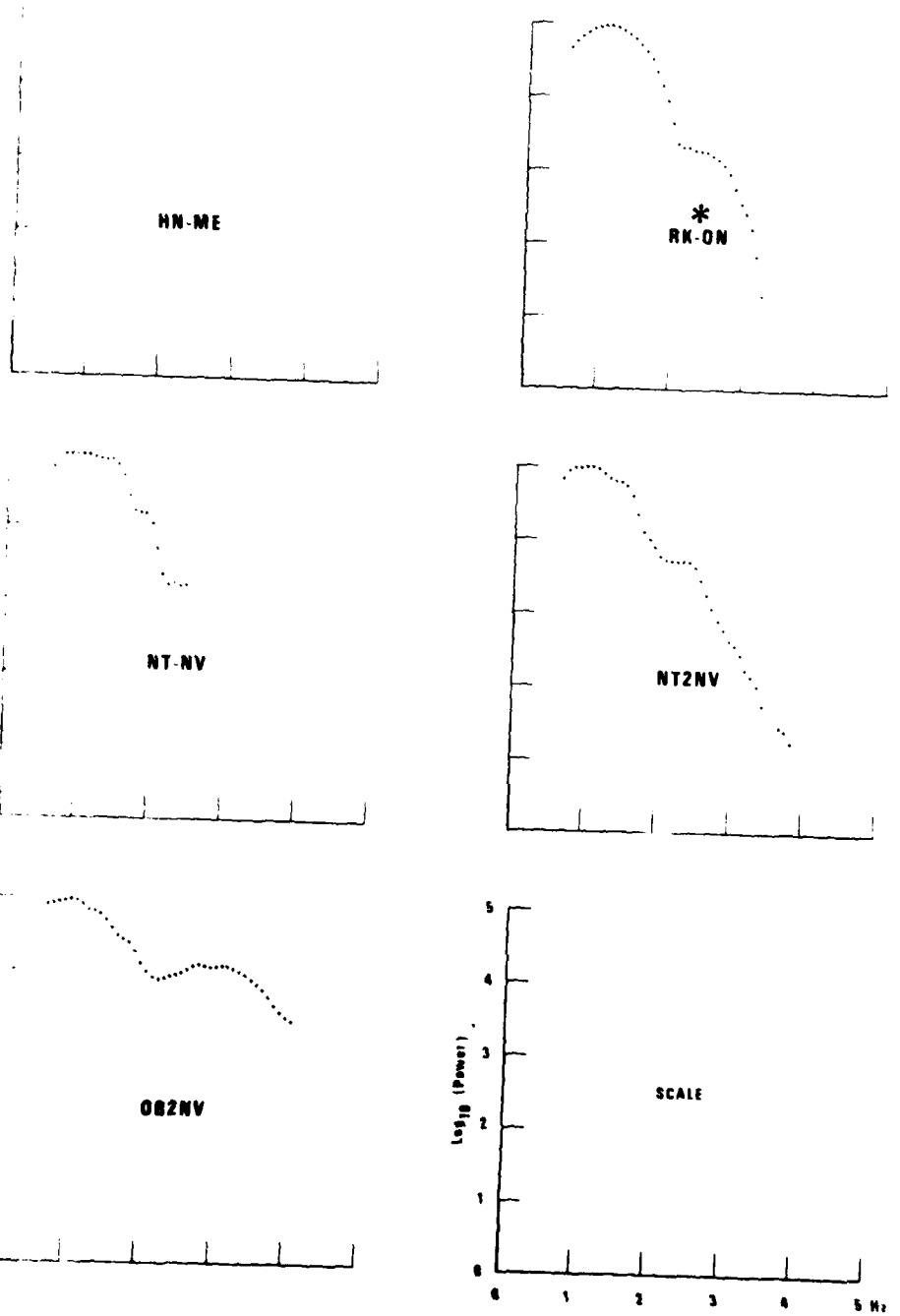
1 JAN 77
11:33:42.4
JAPAN
#80



5 JAN 77
10:37:33.6
VOLCANO ISLAND
#82

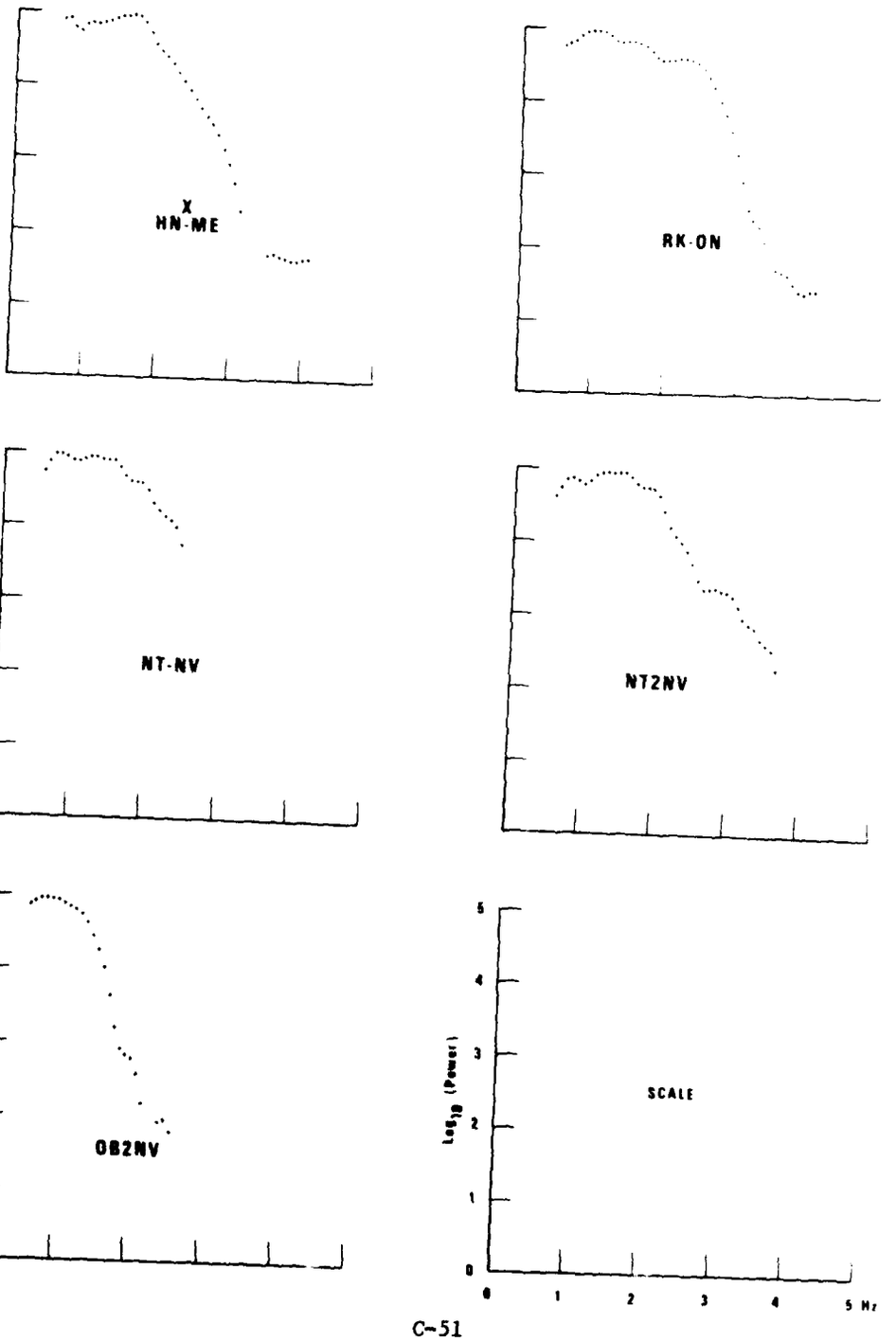


5 JAN 77
22:44:57.0
VOLCANO ISLAND
#83



6 JAN 77
7:55:55.5
KURILES

#84

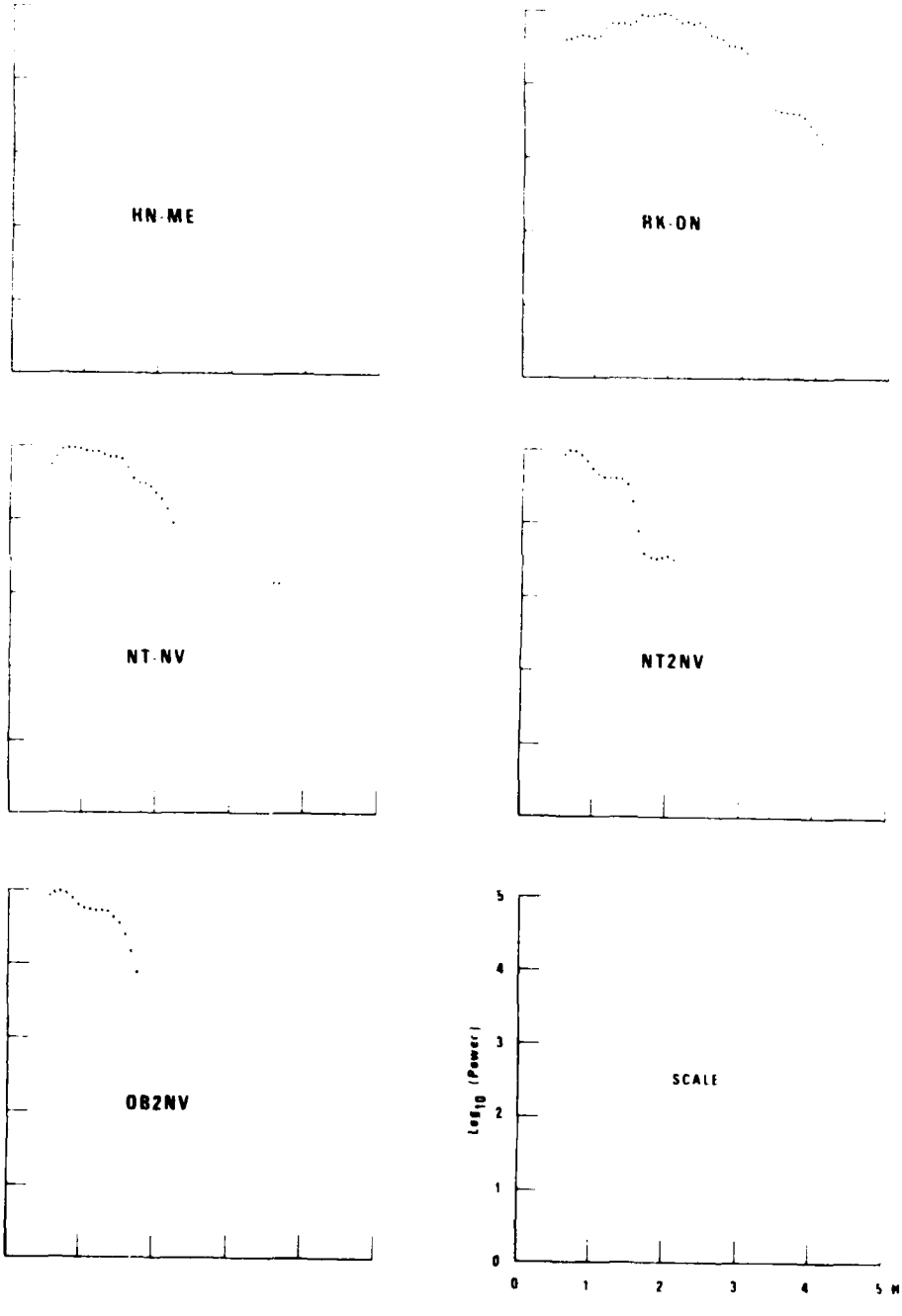


6 JAN 77

16:2:3.6

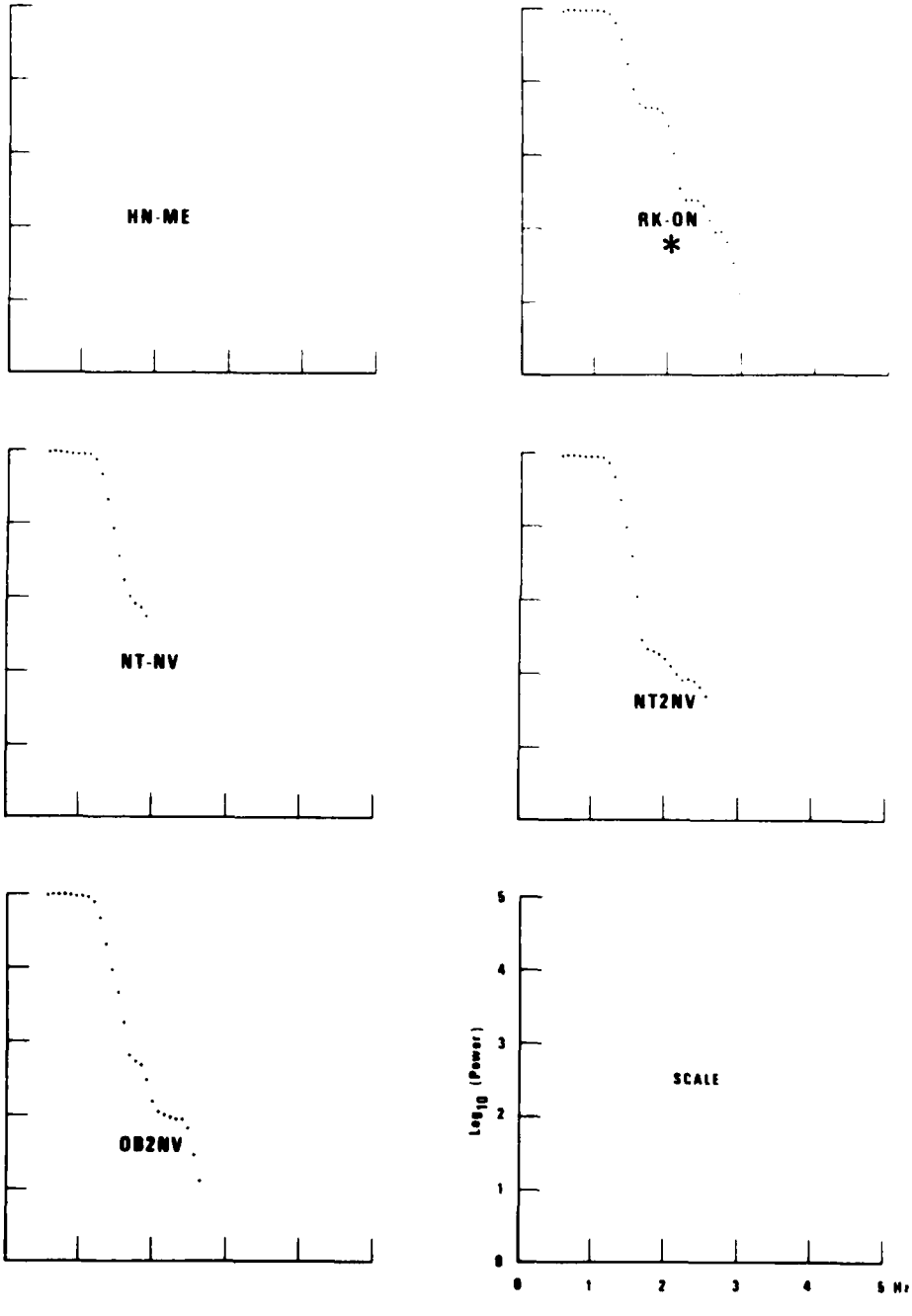
ANDREANOF ISLANDS

#85

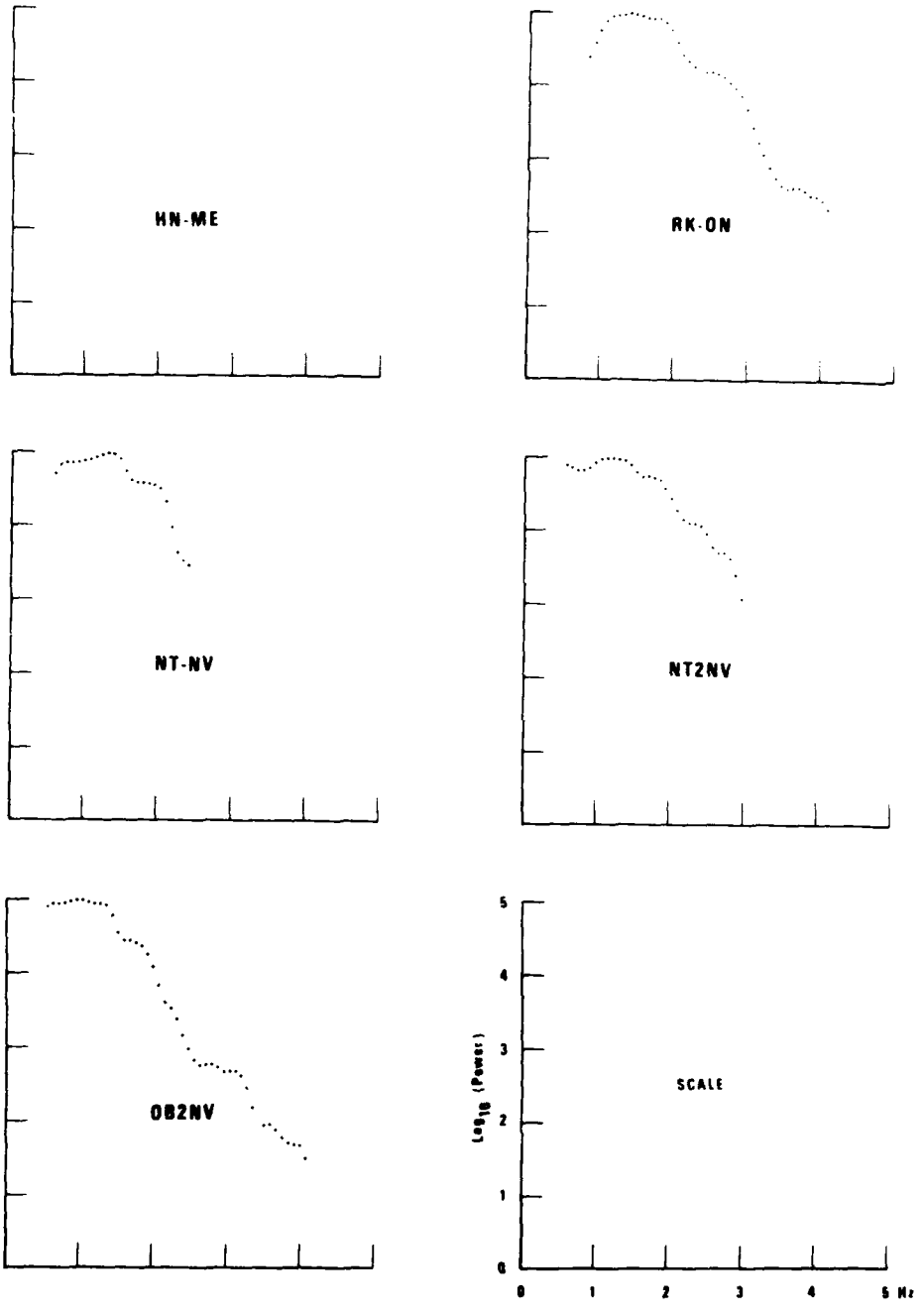


17 JAN 77
6:23:42.6
BONIN ISLAND

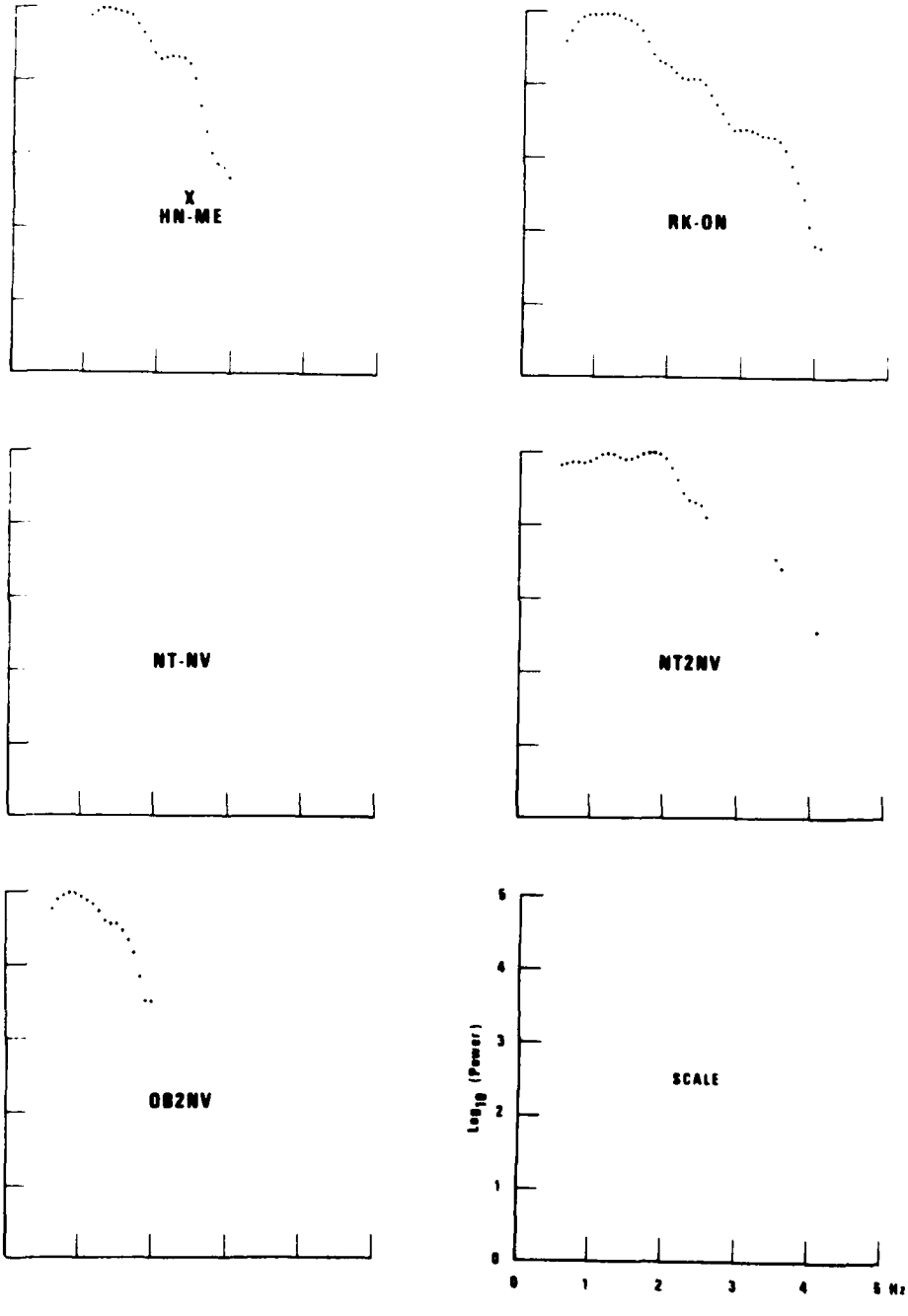
#87



17 JAN 77
9:42:22.5
S. ALASKA
#88

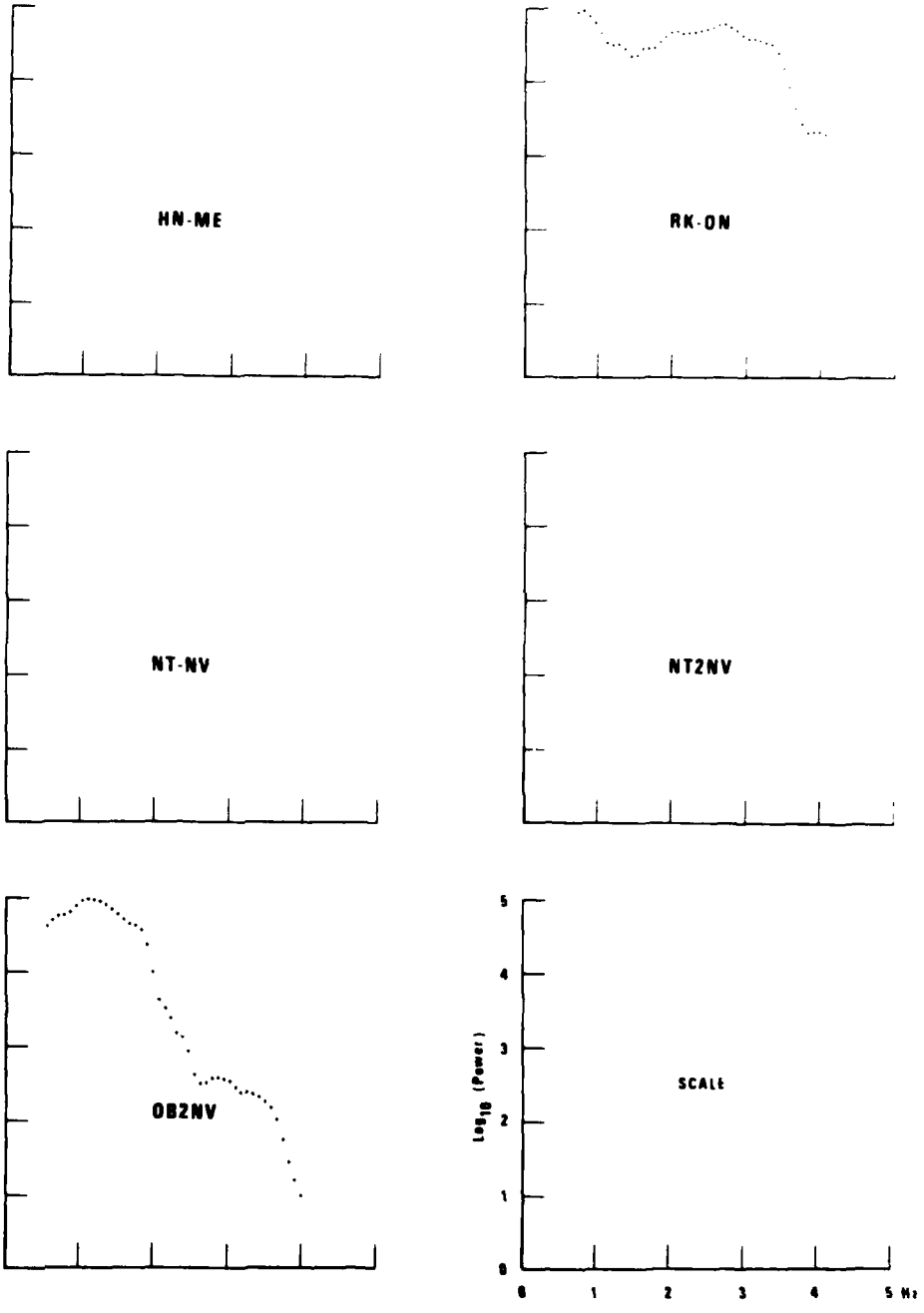


24 JAN 77
8:11:30.0
KURILES
#89



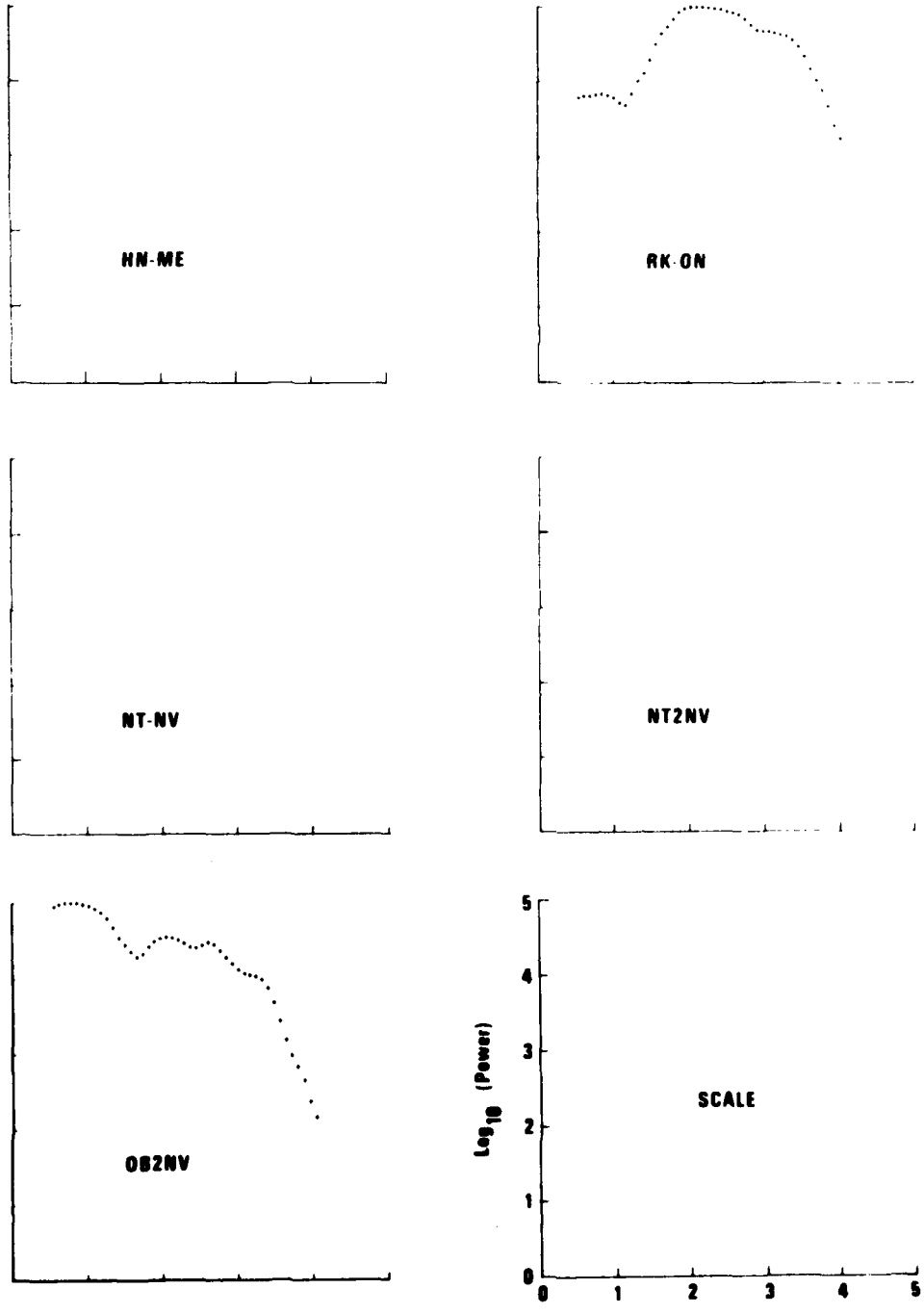
28 JAN 77
4:24:26.0
BONIN ISLANDS

(This Event Inadvertently Omitted From The Data Shown In Appendix A)



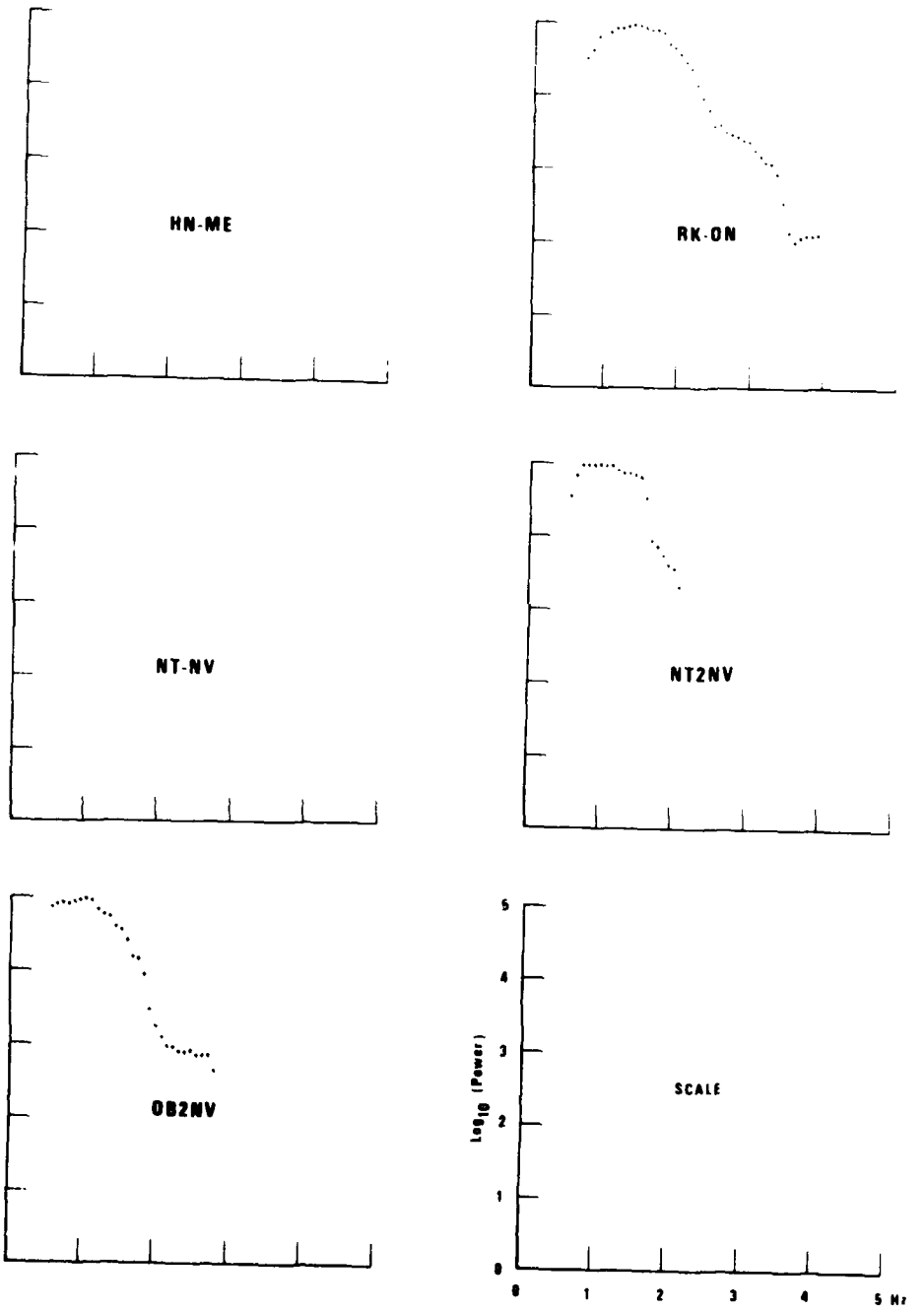
3 FEB 77 21
21:30:59.0
RUSSIA-CHINA BDR

#90



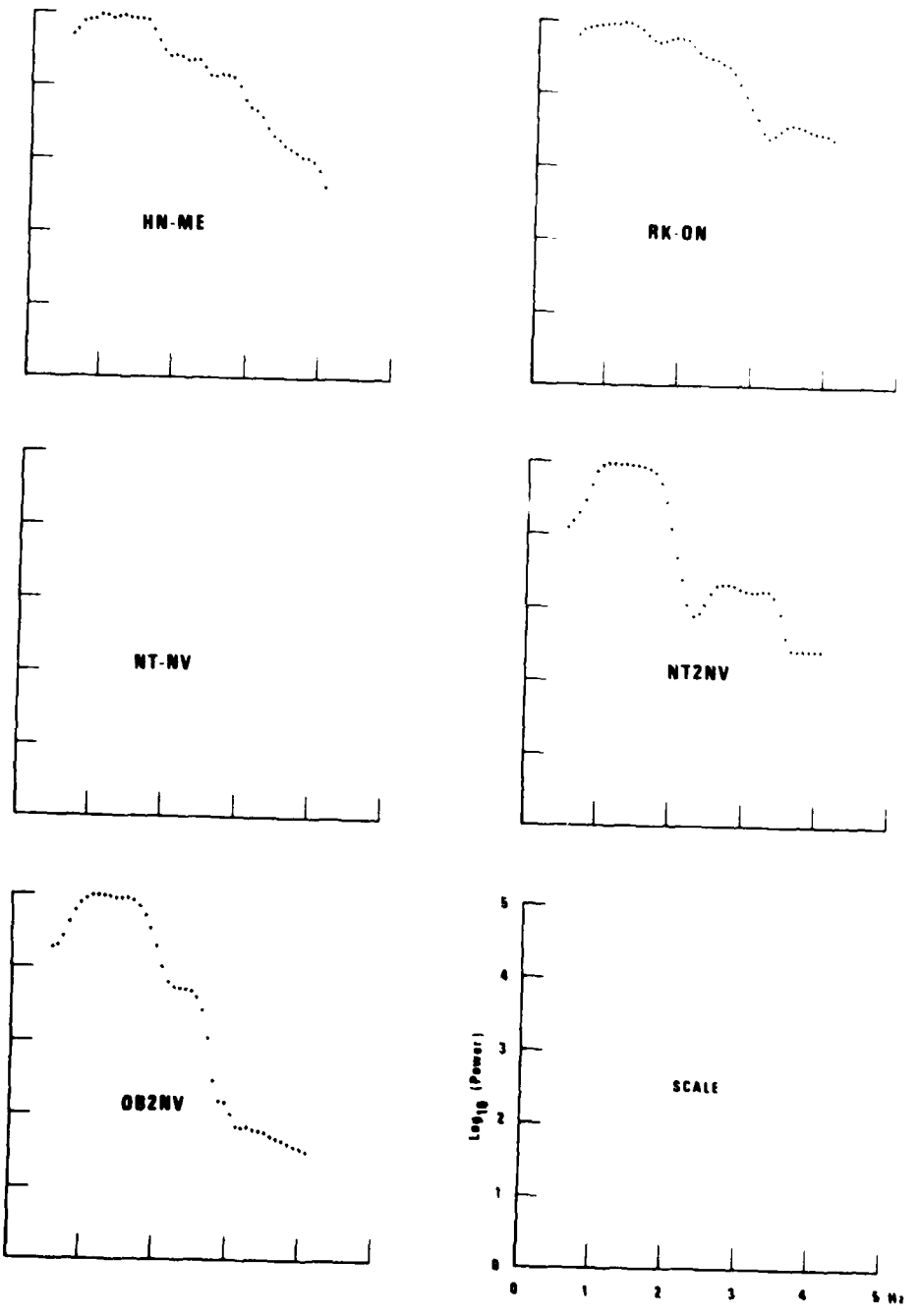
6 FEB 77
0:31:29.0
N. ATLANTIC

#91



13 FEB 77
5:51:11.0
KAMCHATKA

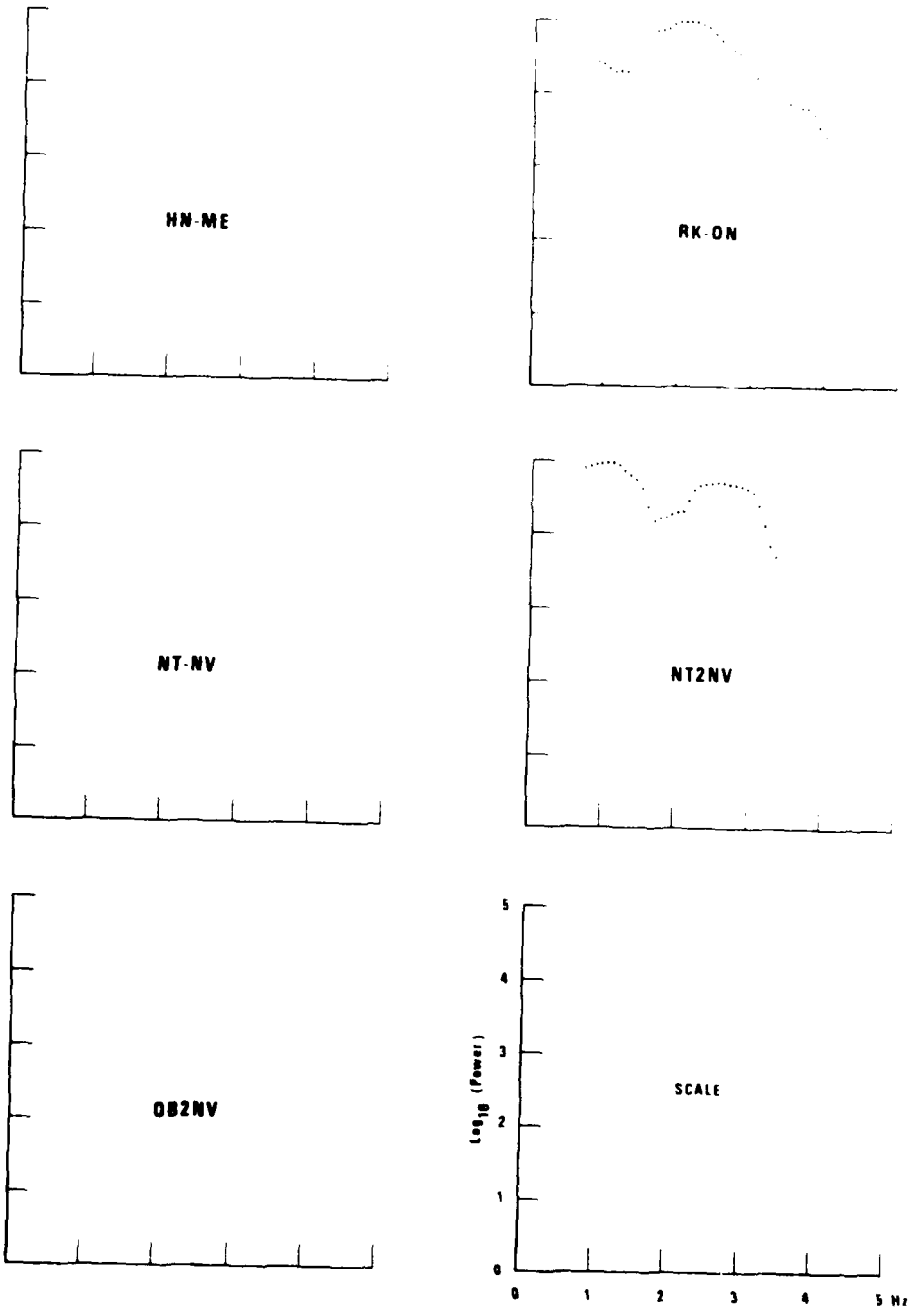
#92



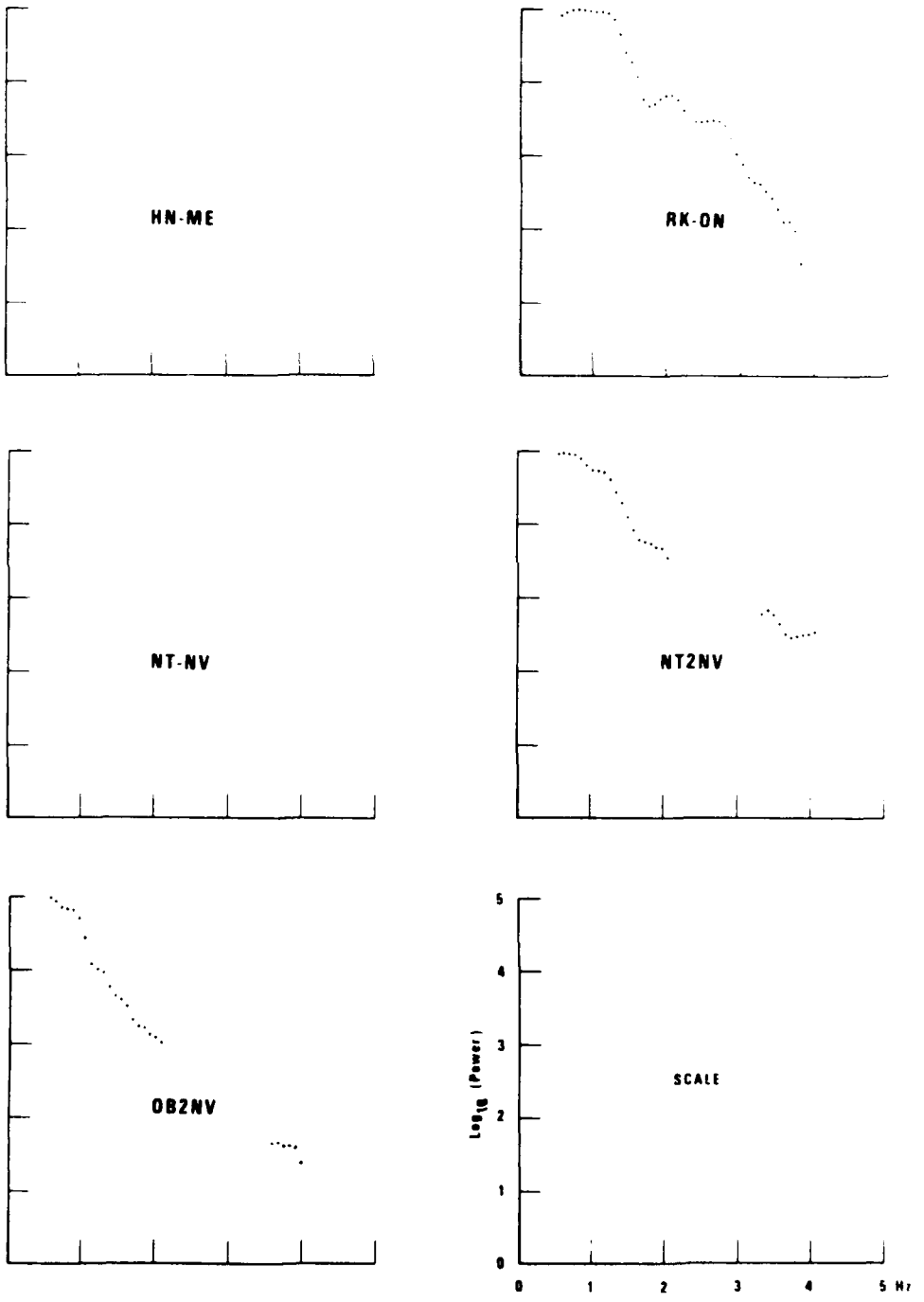
16 FEB 77
0:50:18.0
N. ATLANTIC OCEAN

#93

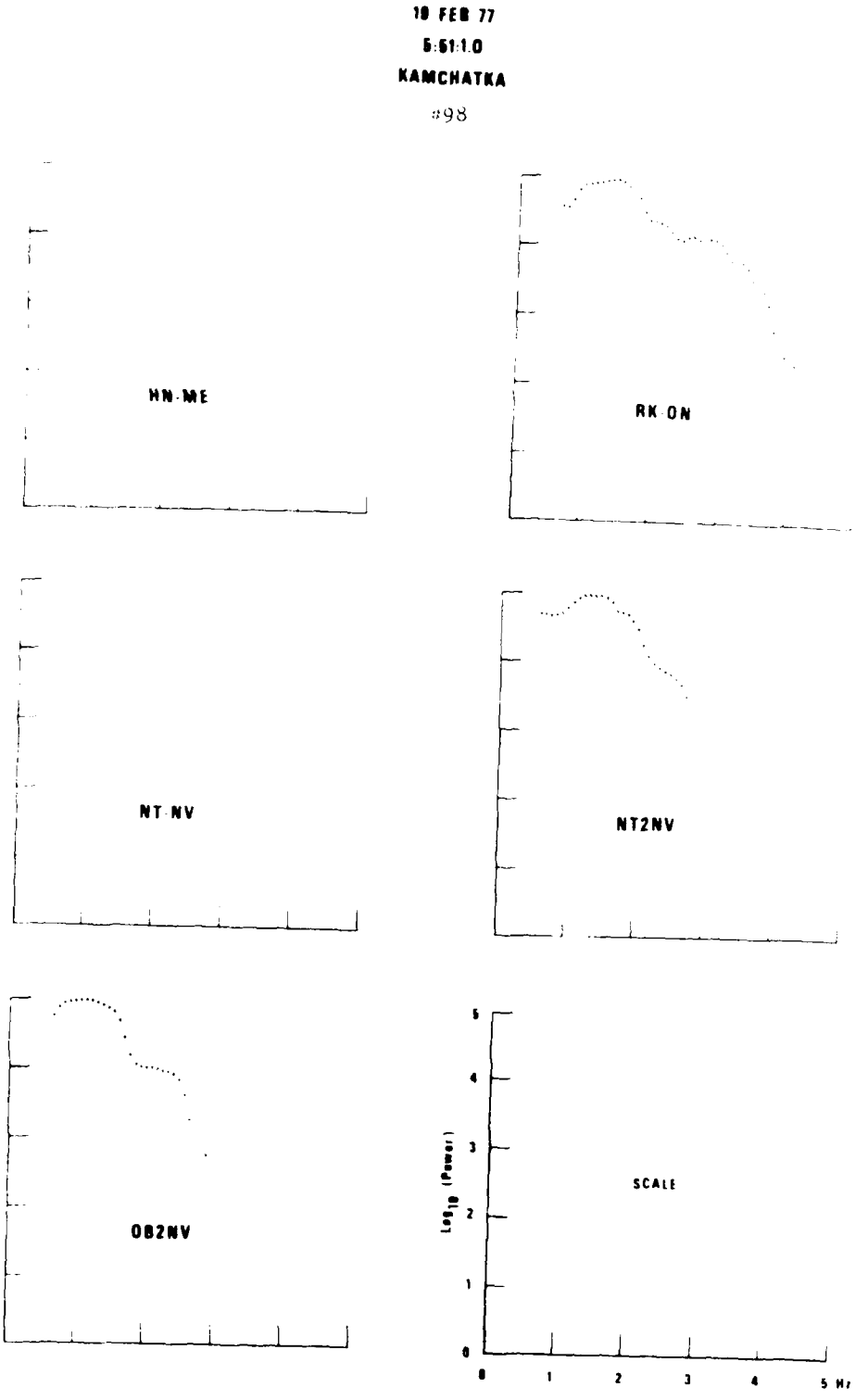
16 FEB 77
1:5:48.0
N. PACIFIC OCEAN
#94



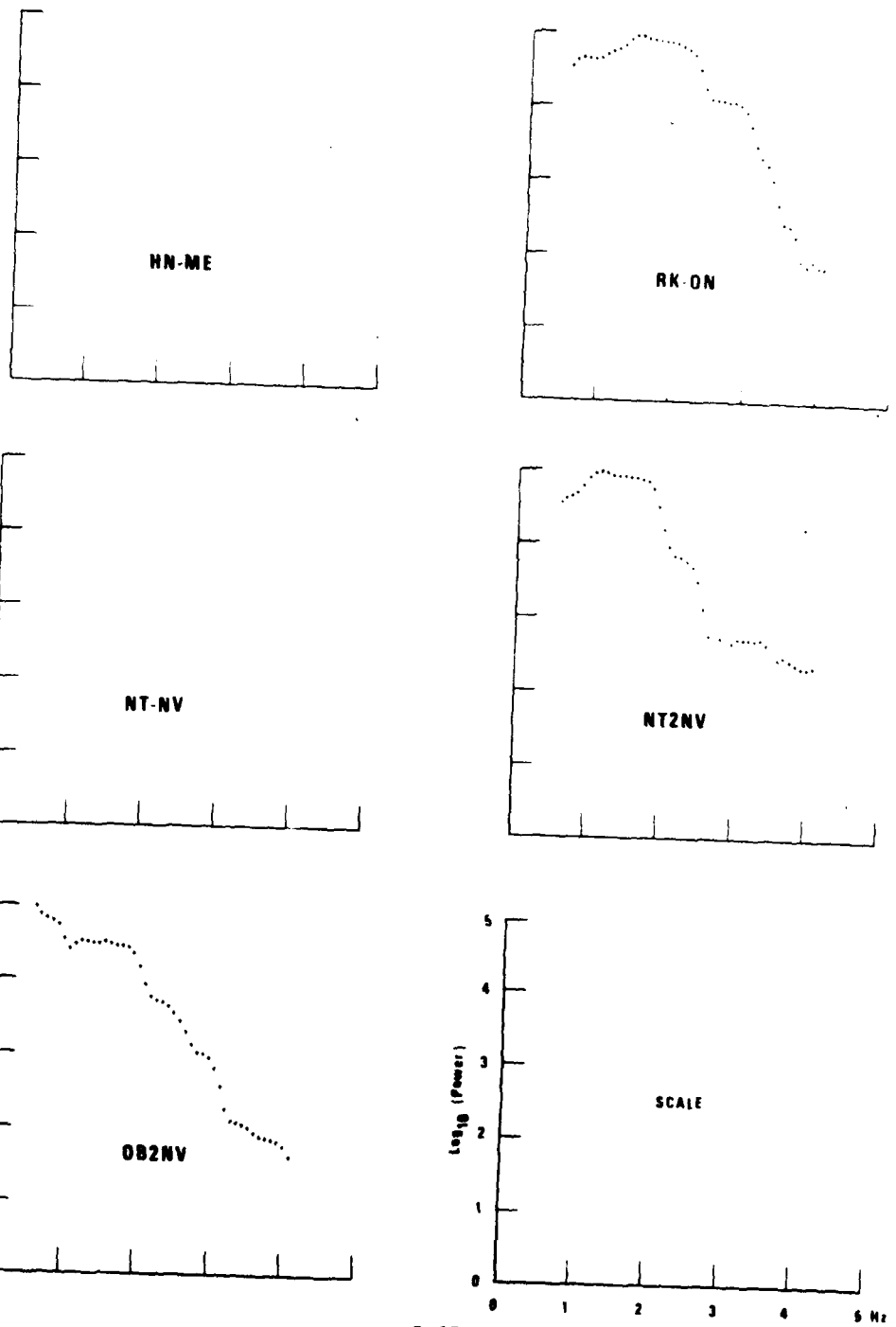
17 FEB 77
13 32 7.0
KORMANDORSKI ISLAND
#95



18 FEB 77
20:51:26.0
JAPAN
#96

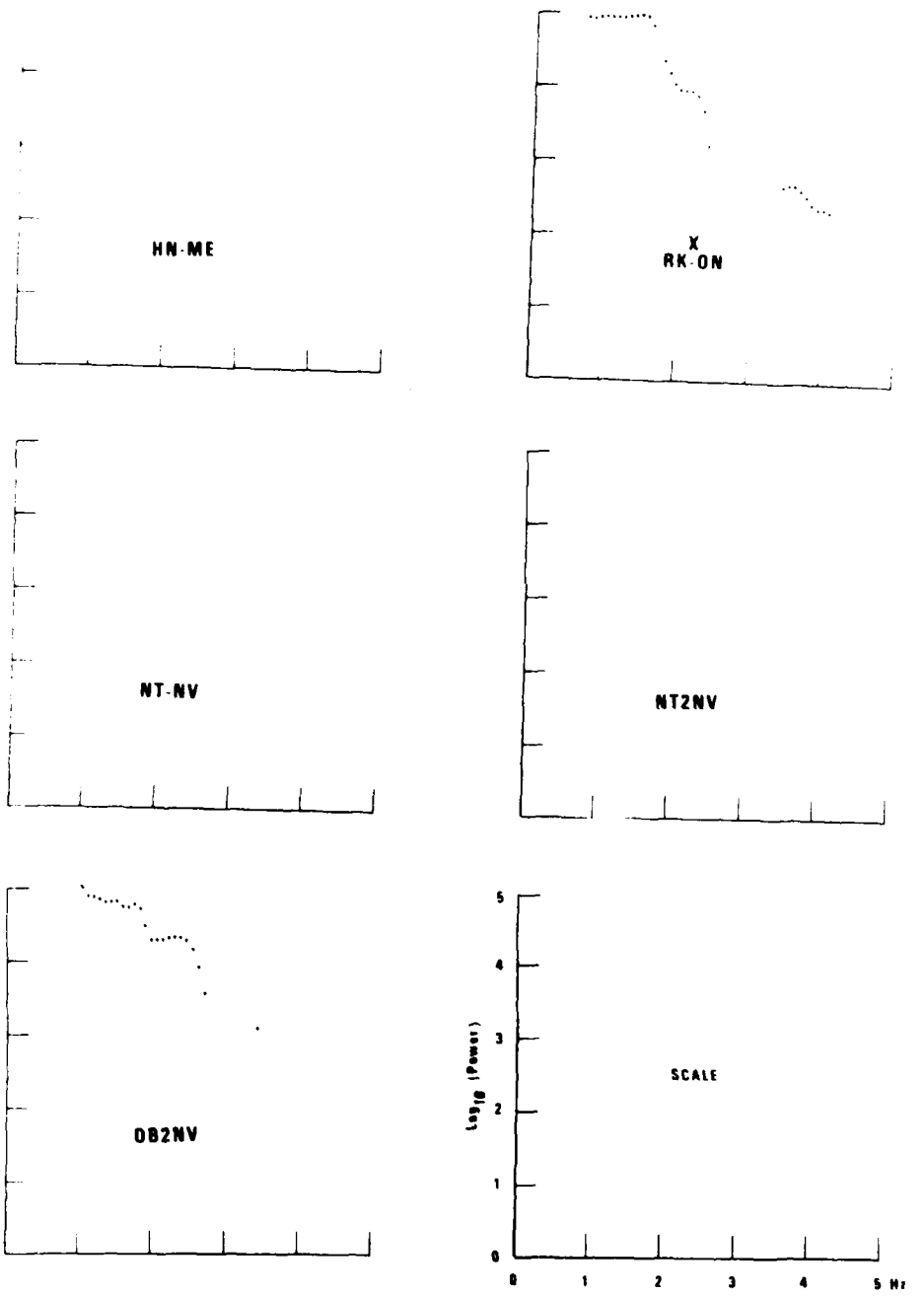

19 FEB 77
5:51:1.0
KAMCHATKA
#98
HN-ME
RK-ON
NT-NV
NT2NV
OB2NV
SCALE
$\log_{10}$ (Power)
0
1
2
3
4
5
0
1
2
3
4
5 Hz

19 FEB 77
22:47:7.0
ALEUTIANS
#100



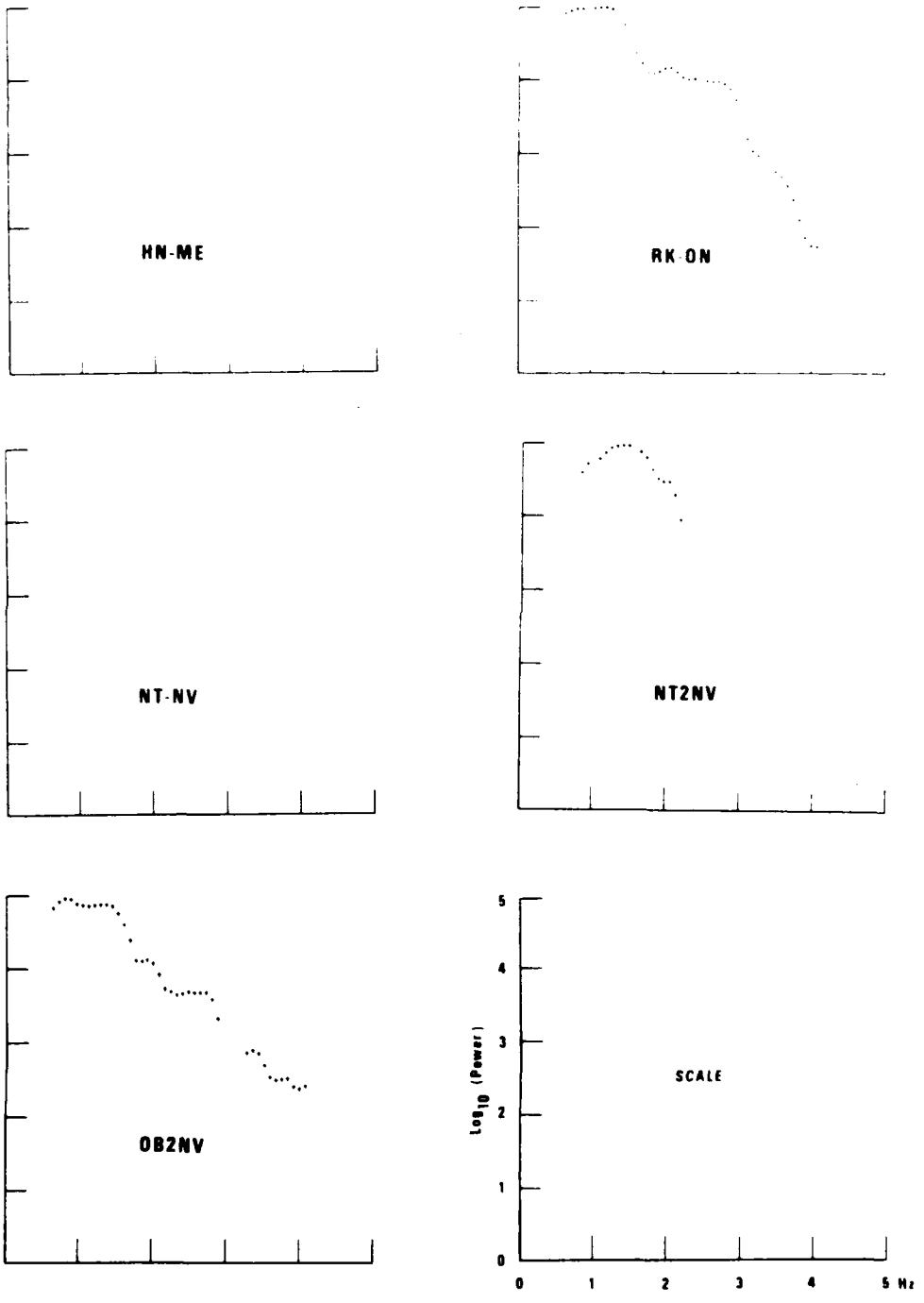
20 FEB 77
7:2:0.0
KODIAK IS

#101

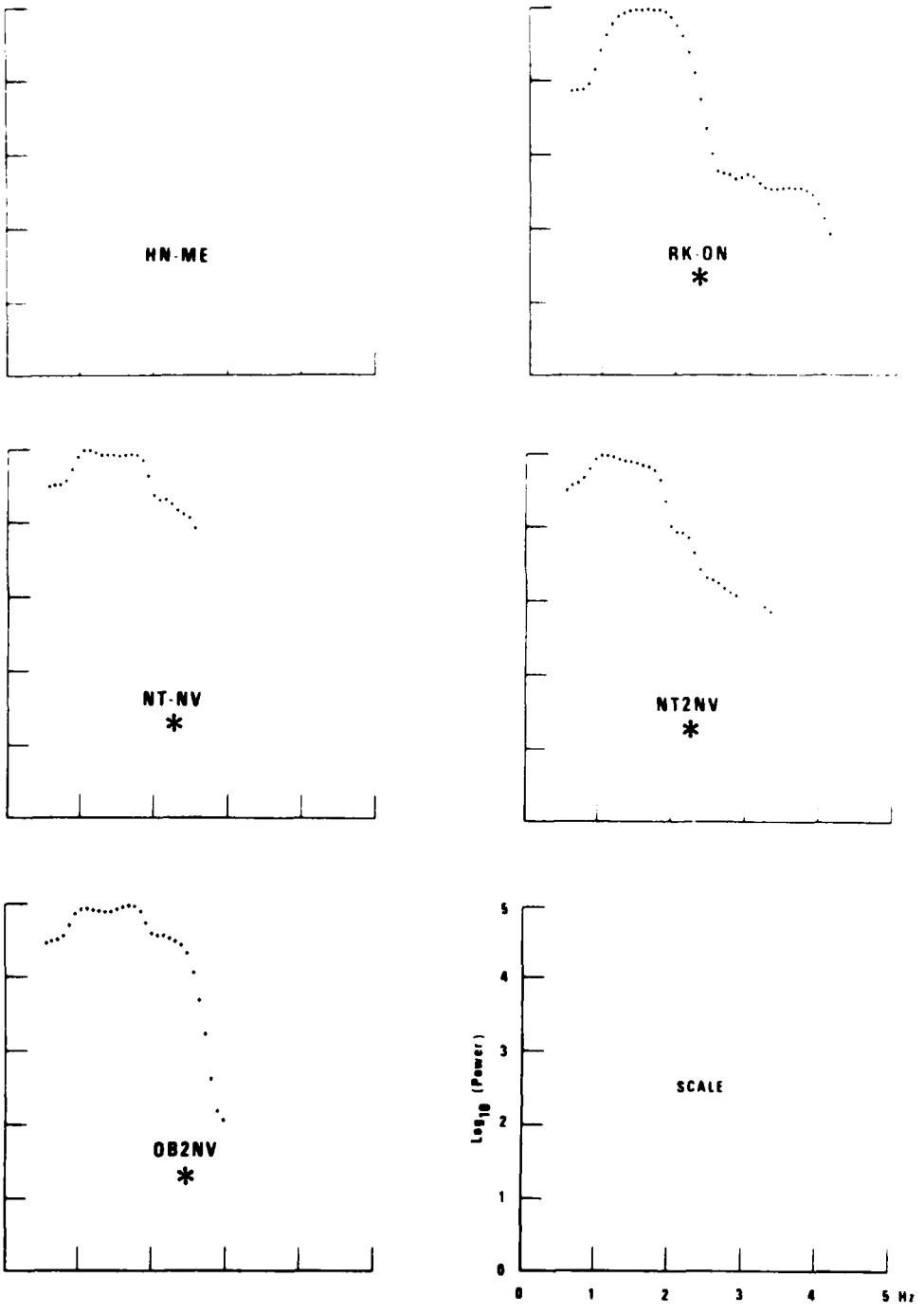


20 FEB 77
8:0:36.0
ALEUTIANS

#102

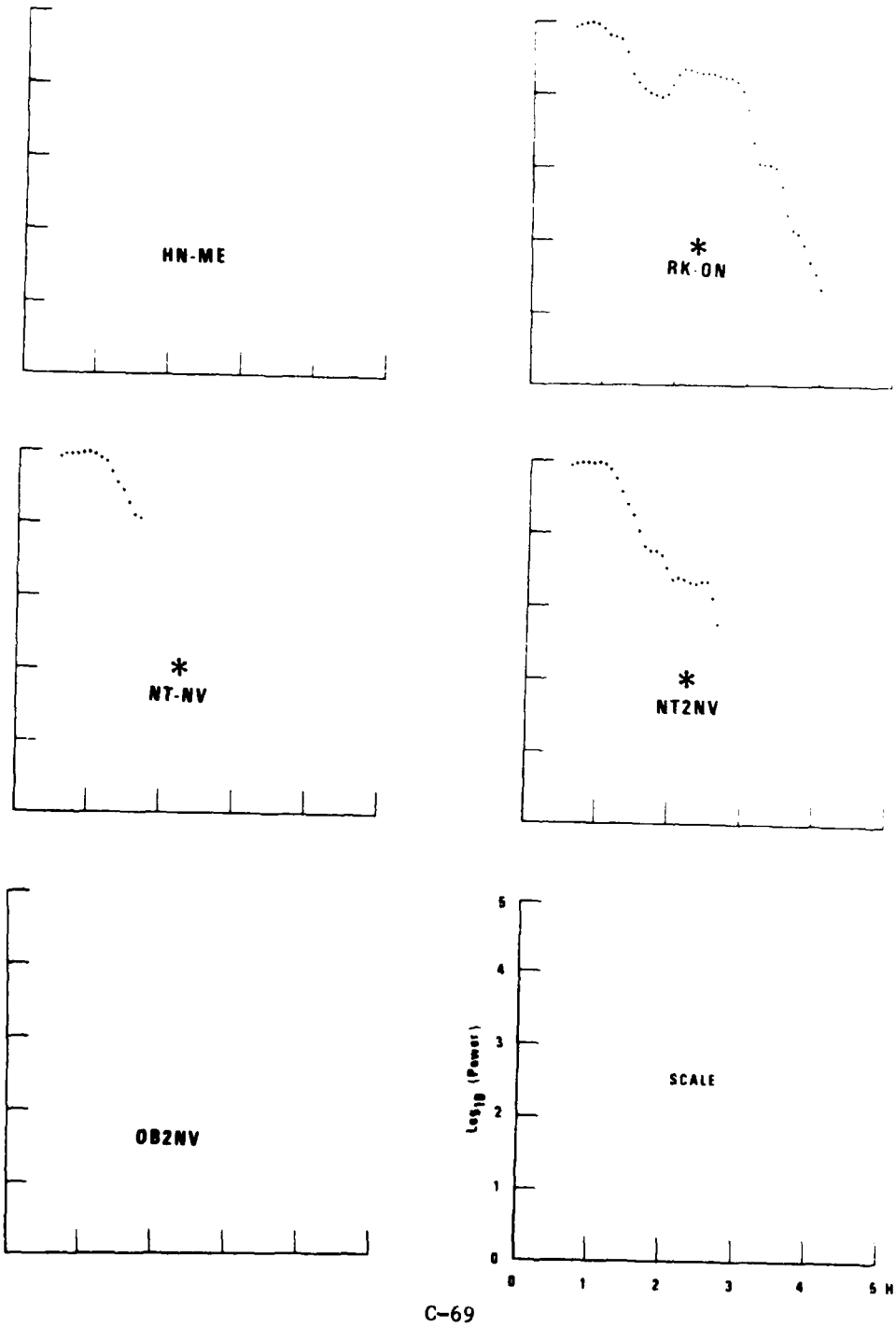


4 MAR 77
19:21:40.0
RUMANIA
#111



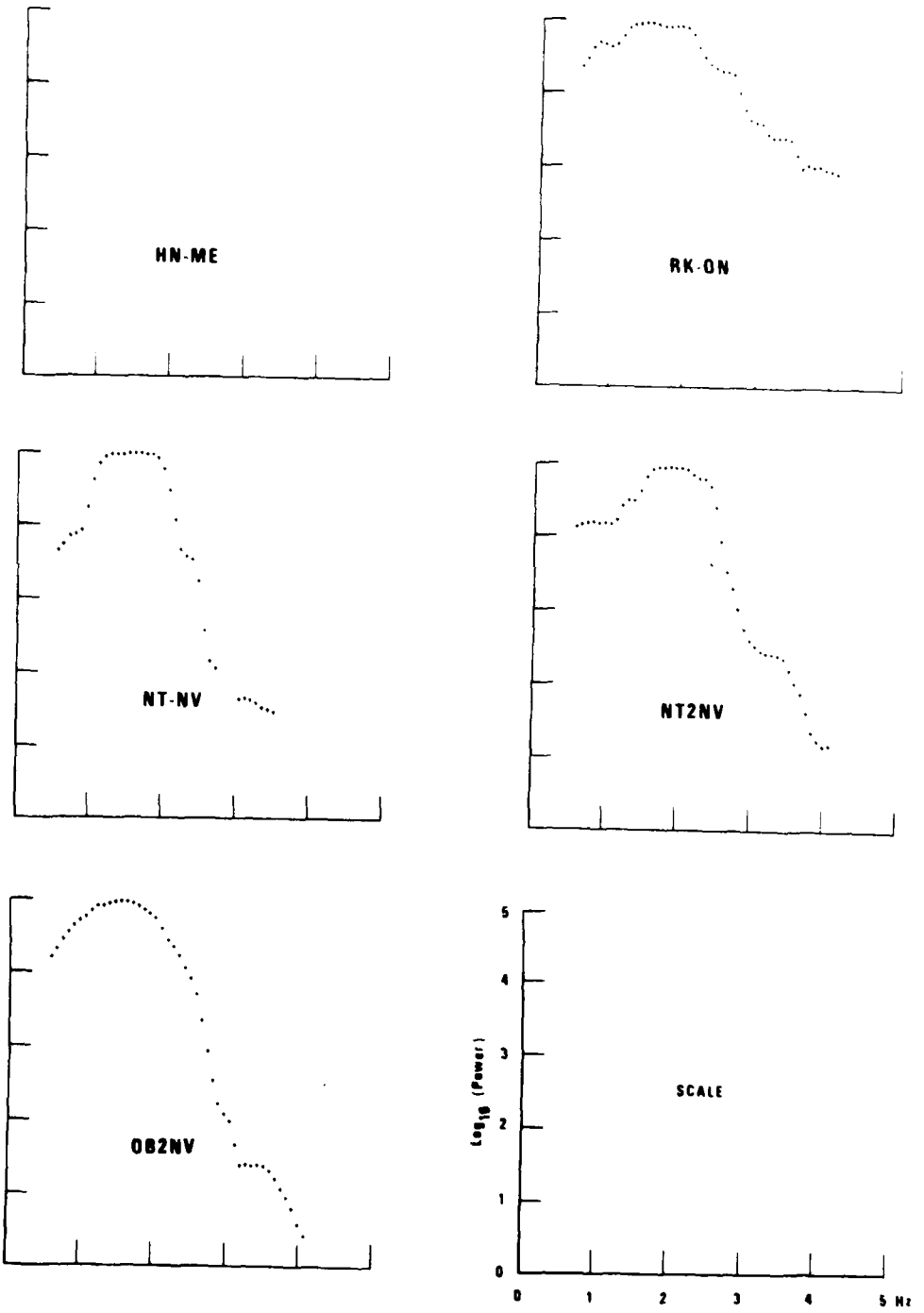
7 MAR 77
0:29:11.0
N.E. CHINA

#112

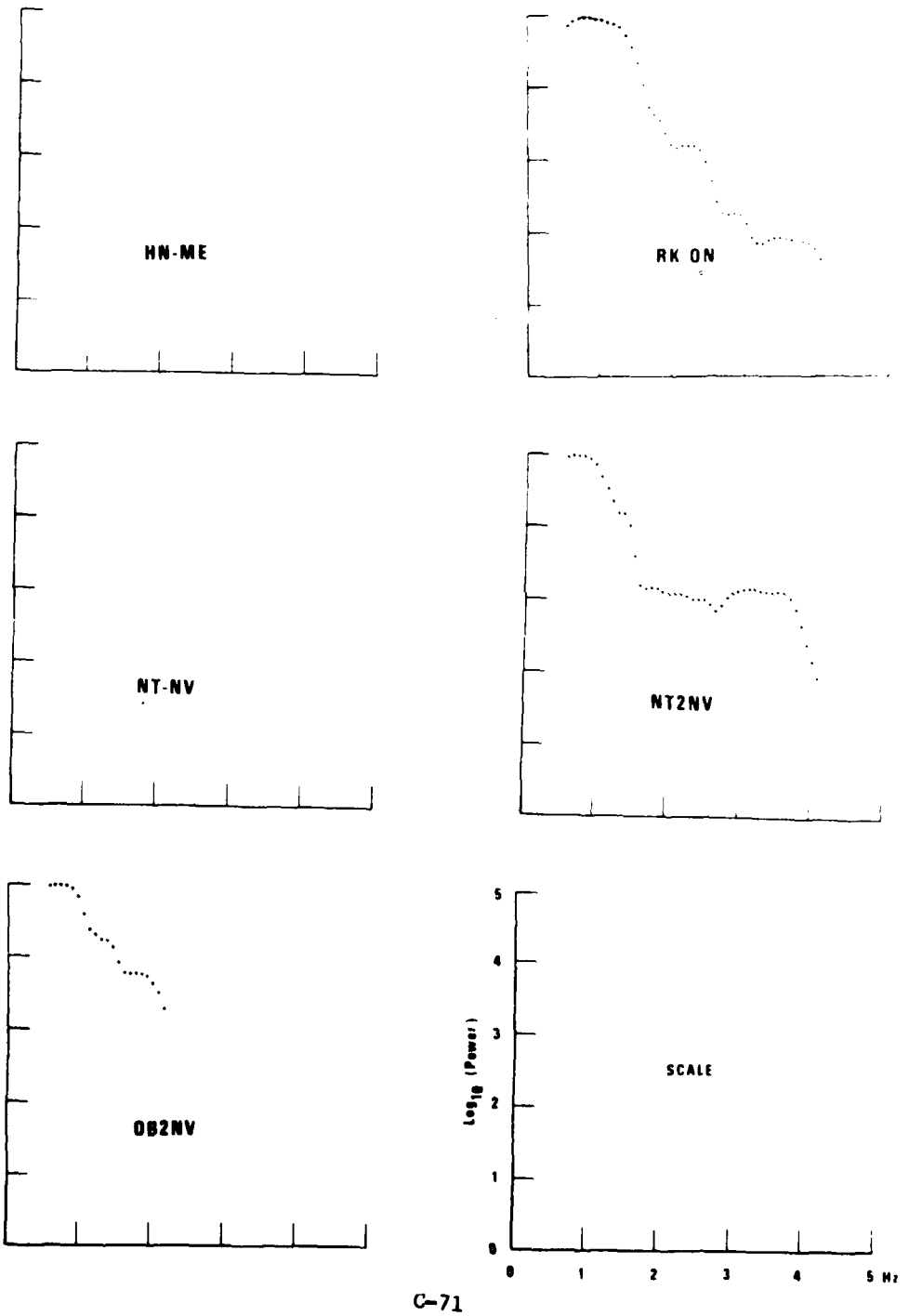


**7 MAR 77**
**9:11:55.0**
**N. PACIFIC**

#113



8 MAR 77
22:46:44.0
BRAZIL
#103

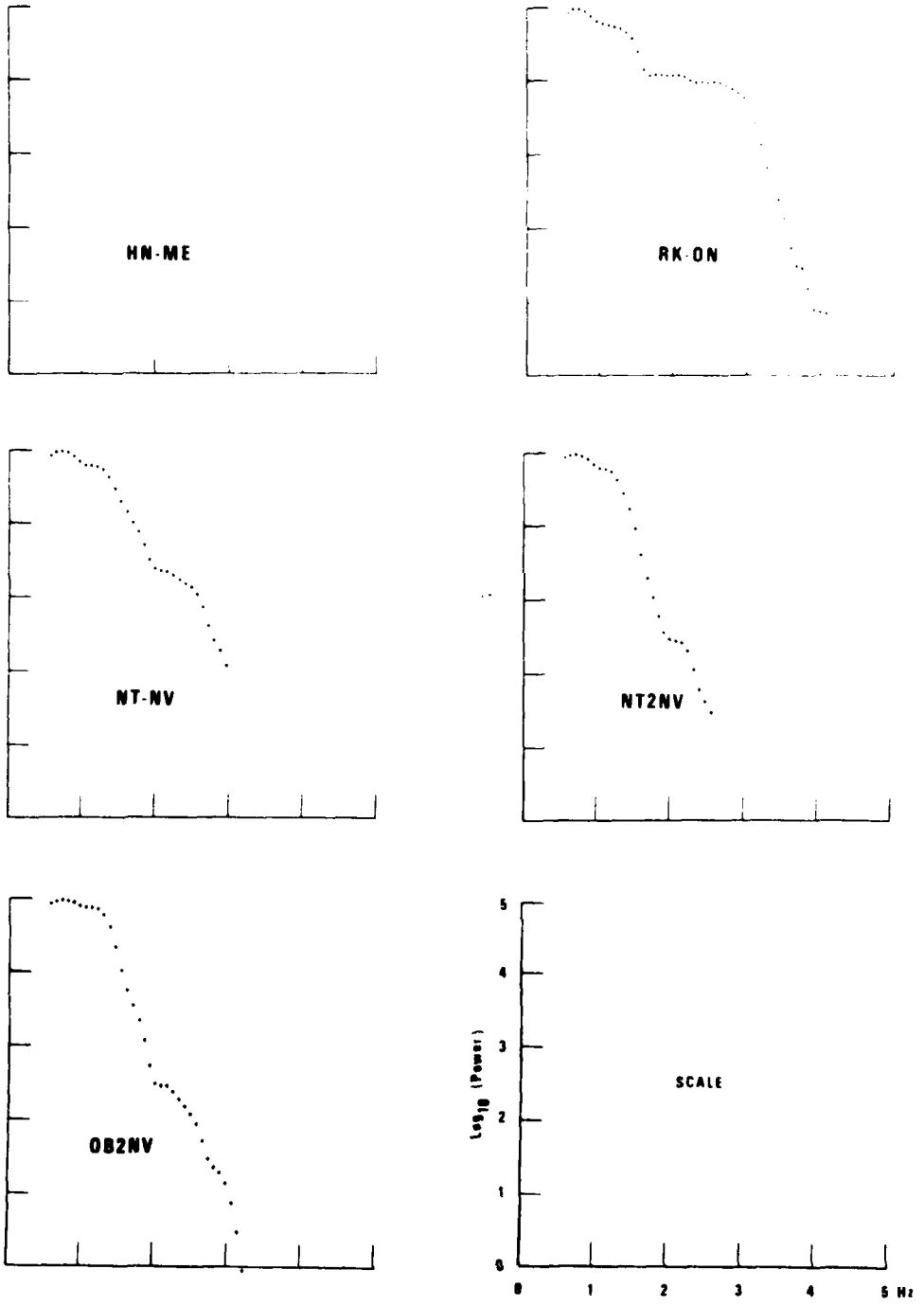


12 MAR 77

2:58:55.0

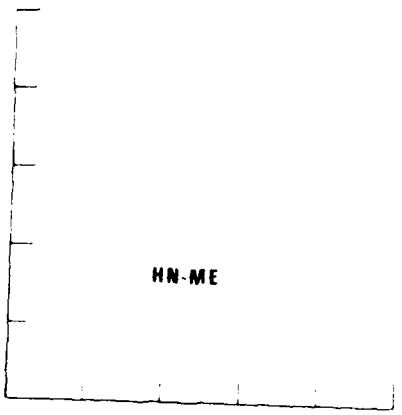
N. ATLANTIC RIDGE

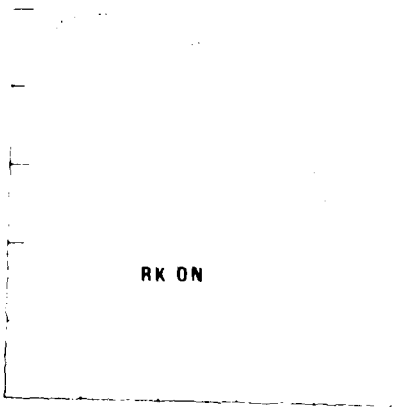
#105

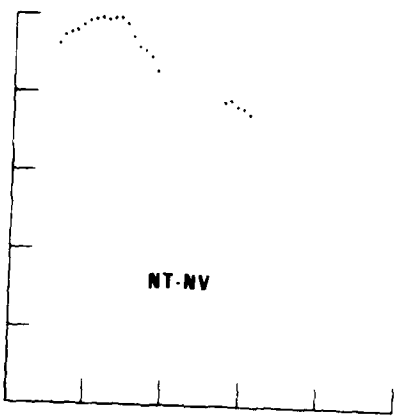


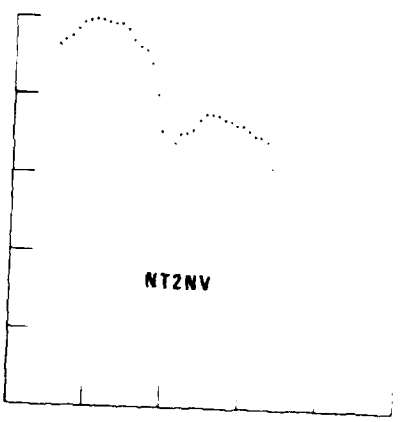
13 MAR 77
4:55:55 0
BRAZIL

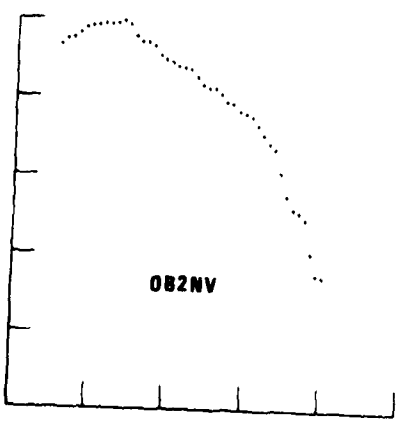
#106

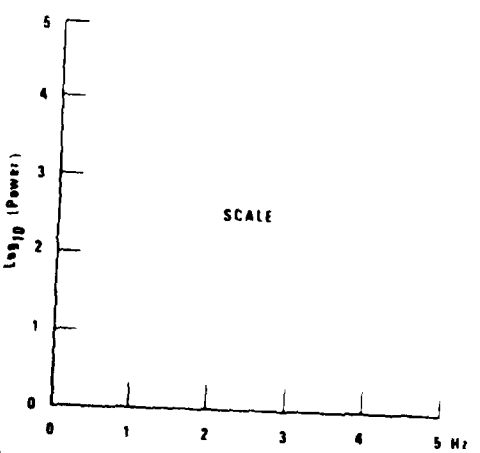


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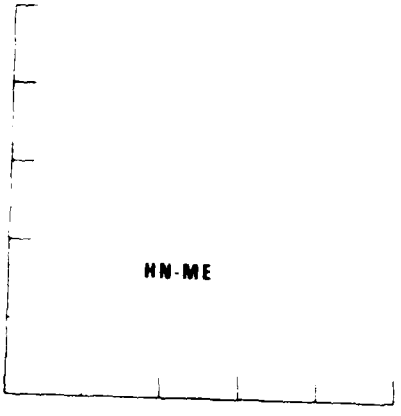


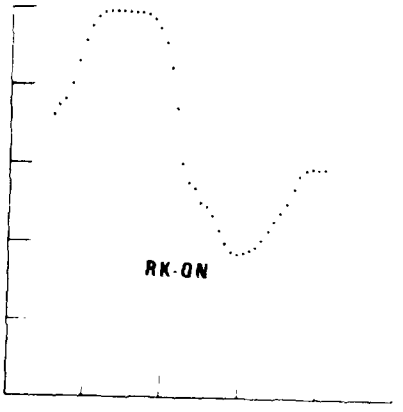


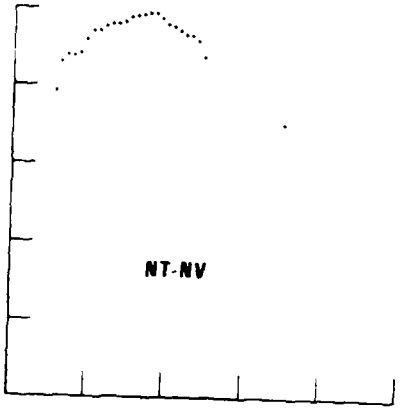


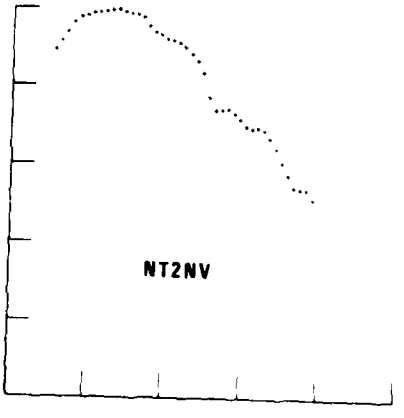


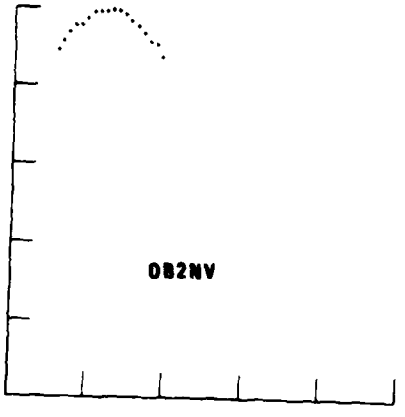


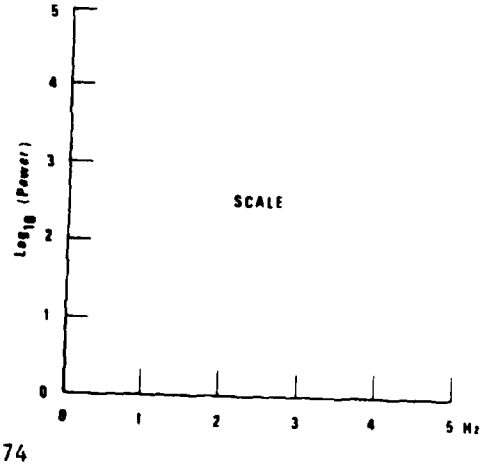

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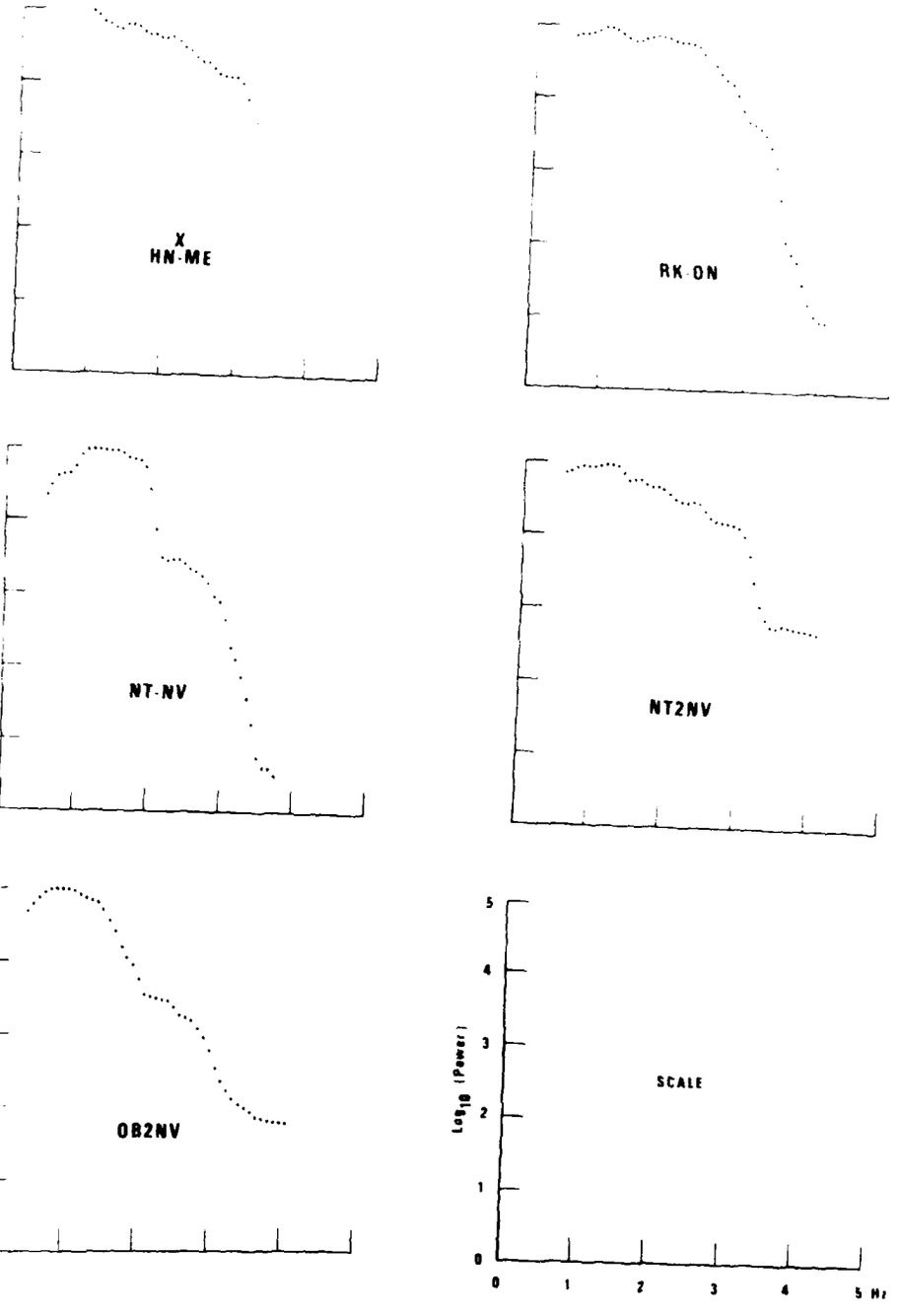

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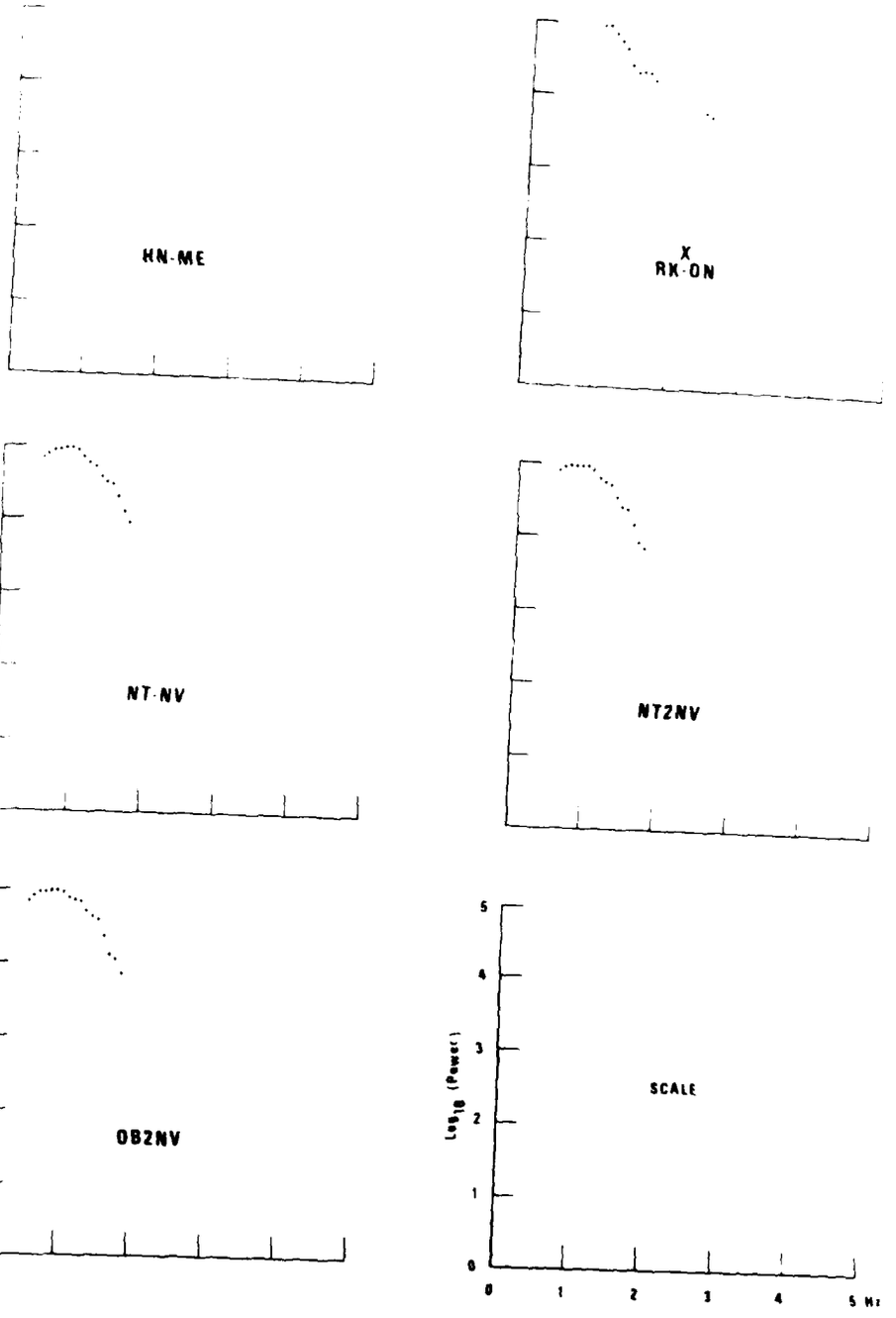

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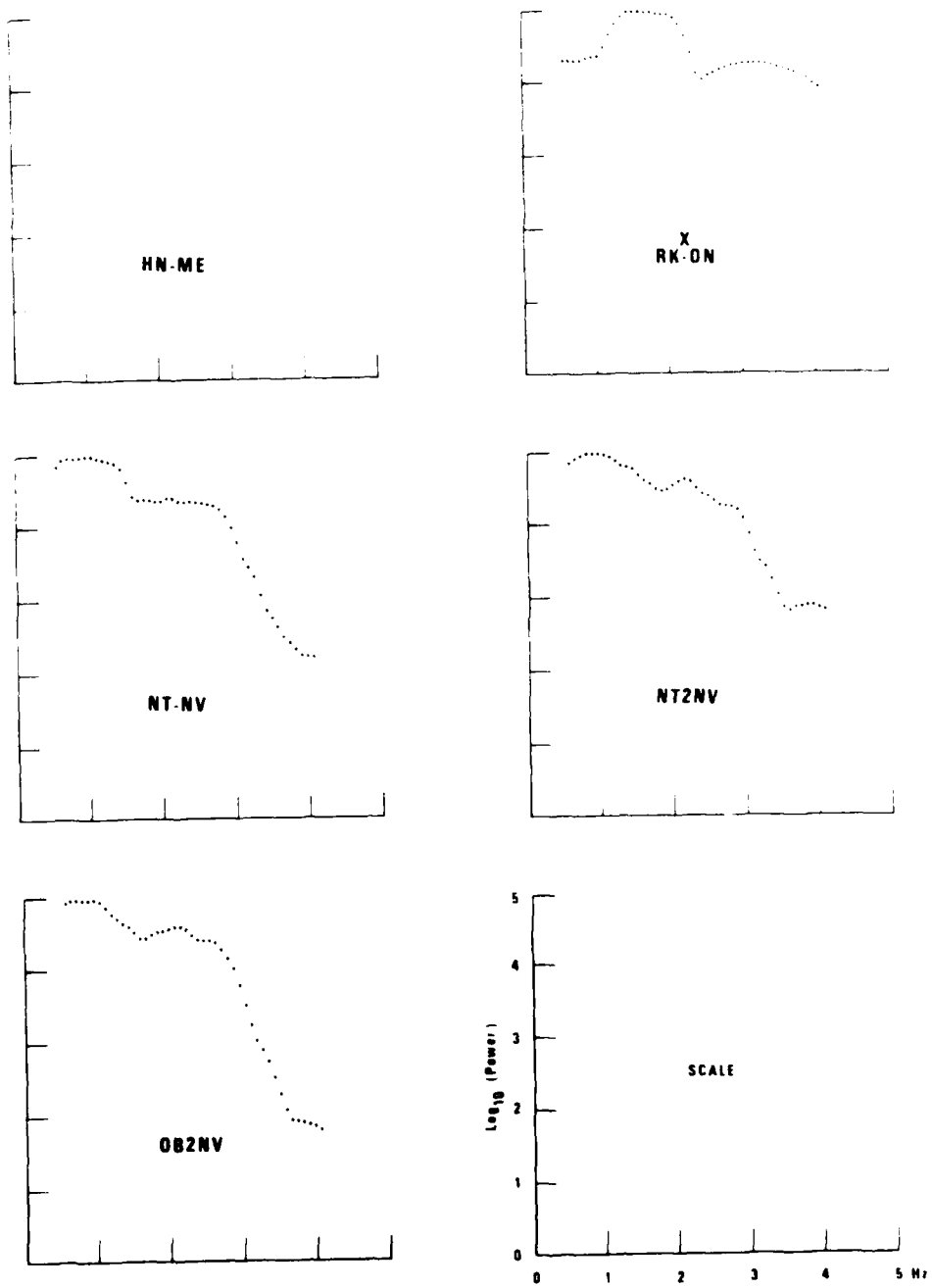
#116



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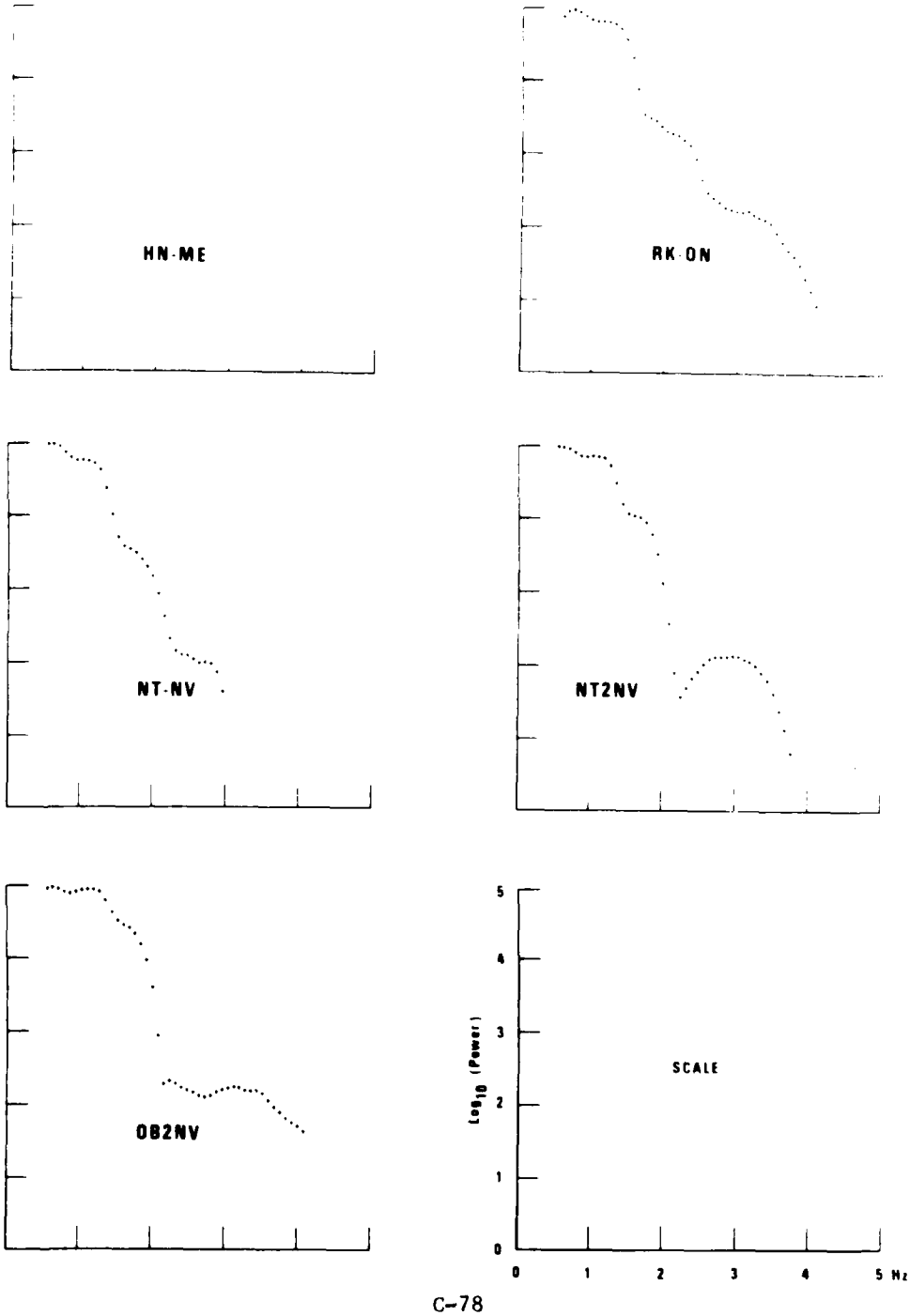

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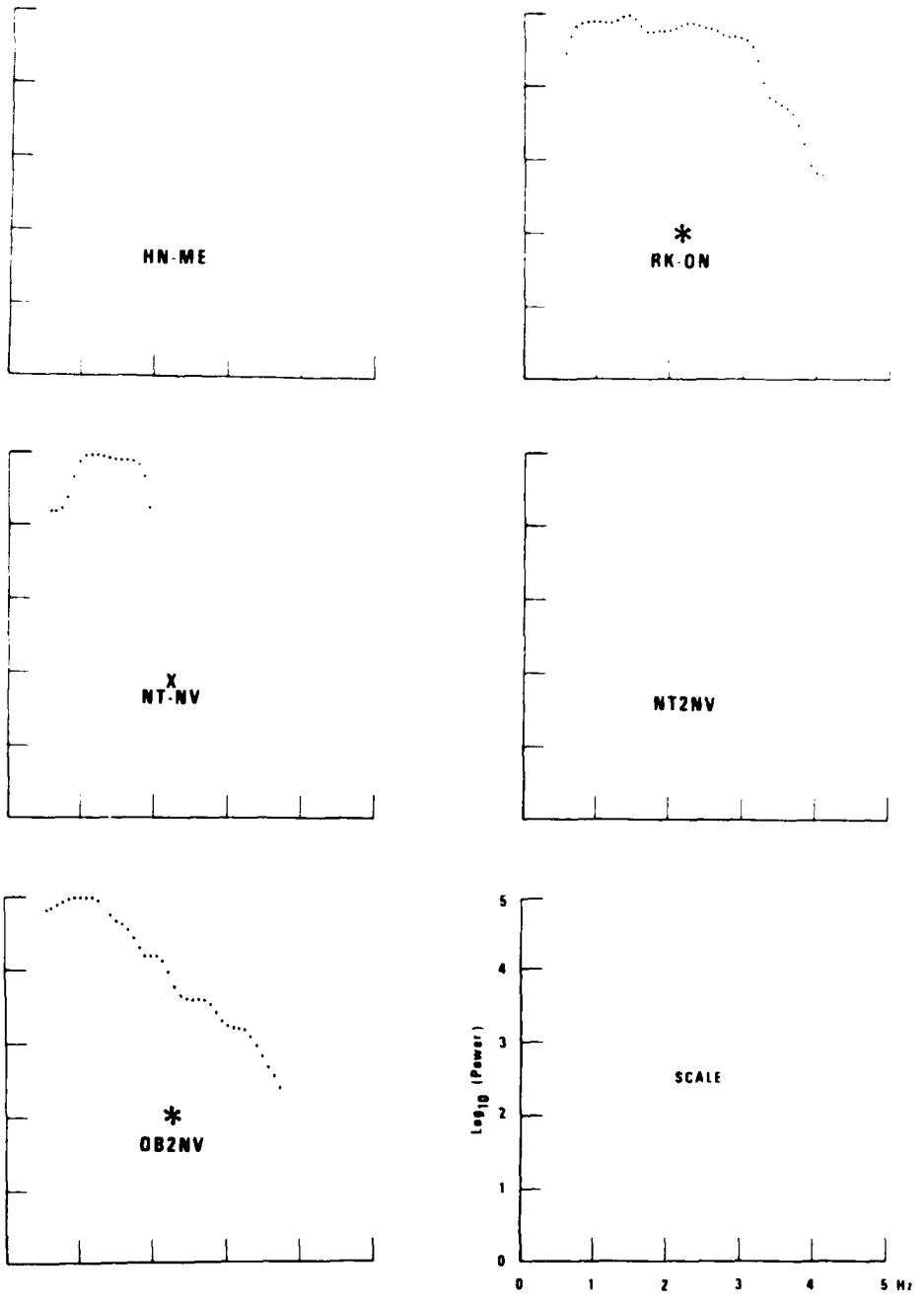
#119



# APPENDIX D

Amplitude spectral ratios of waveforms in Appendix B

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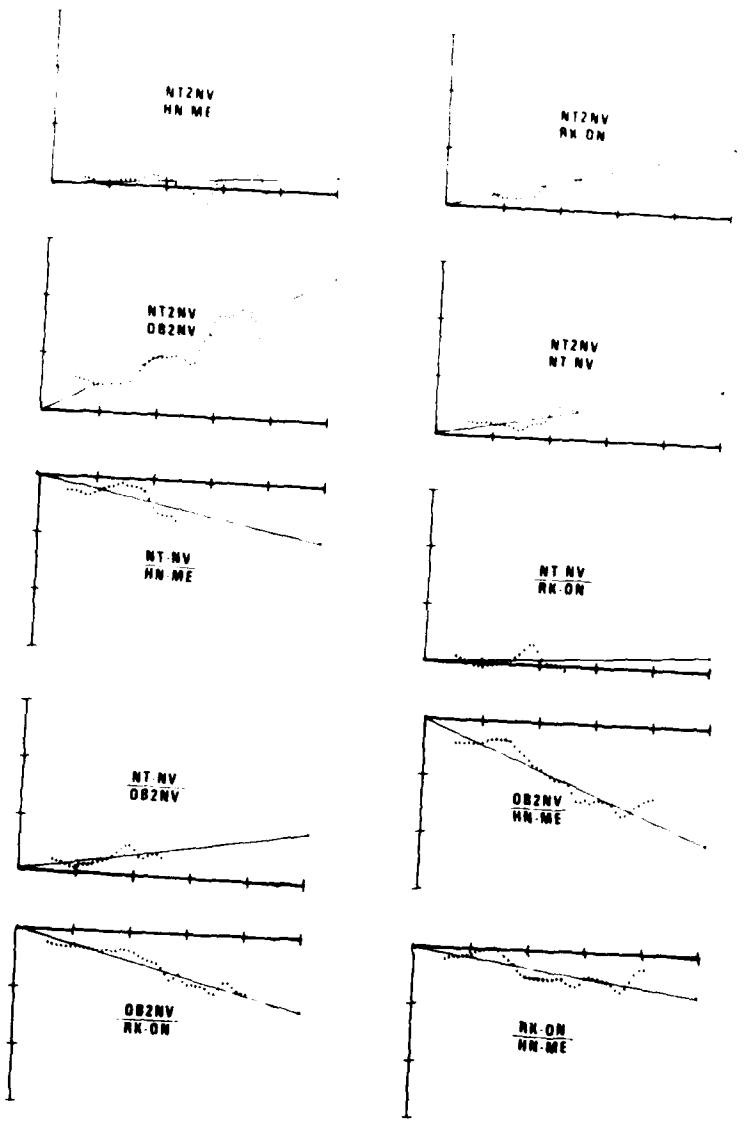


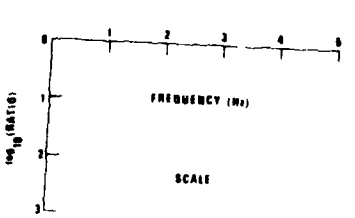

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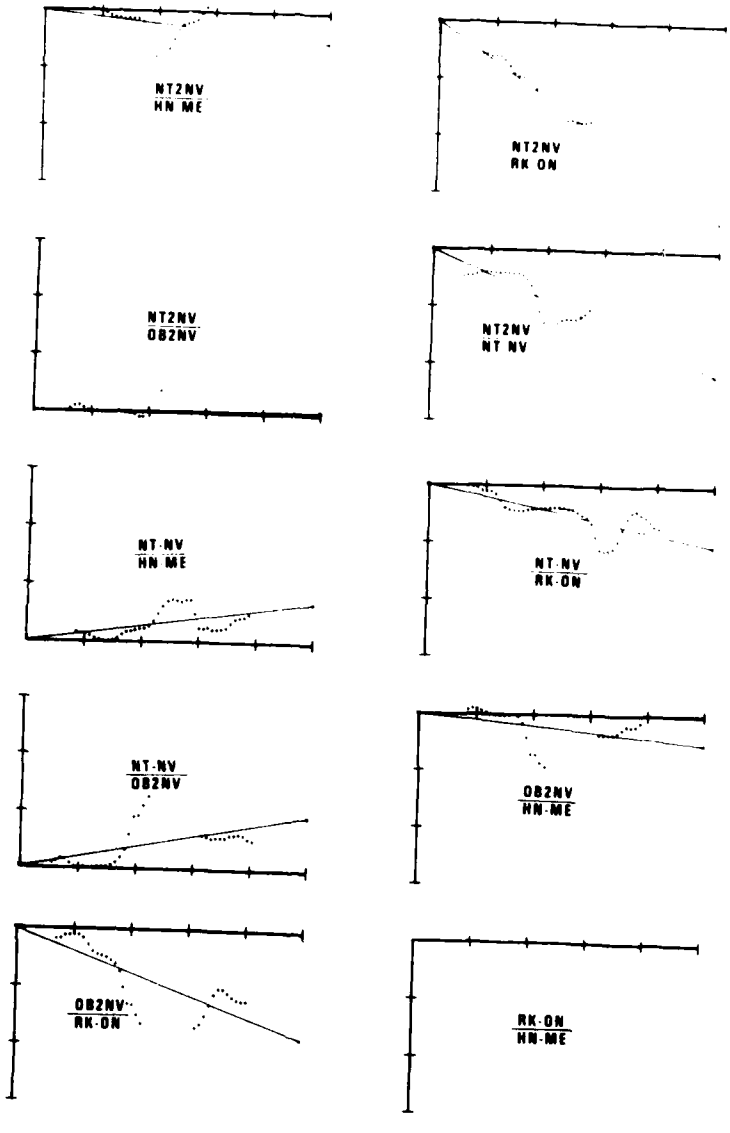


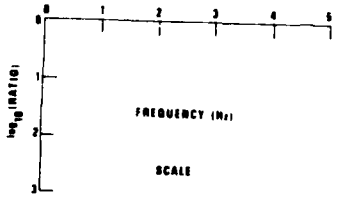

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VOLCANO ISLAND

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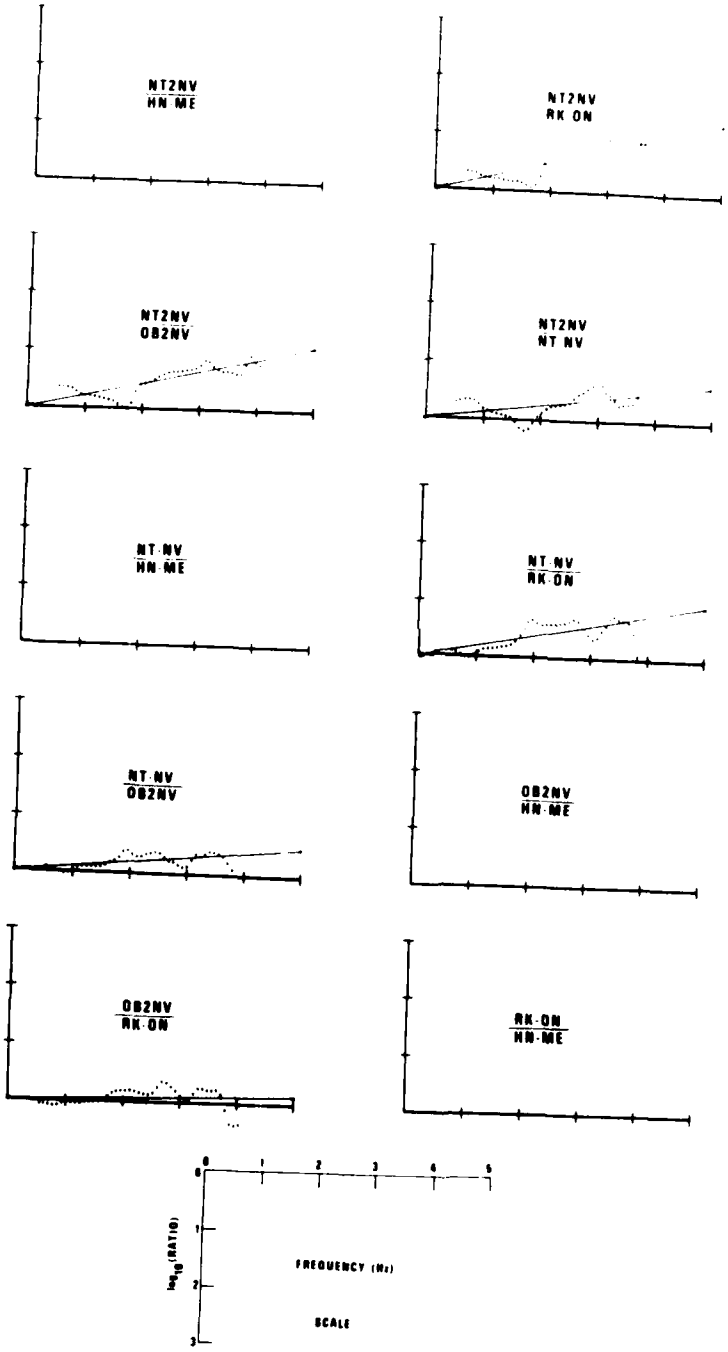

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3000

NOVAYA ZEMLYA

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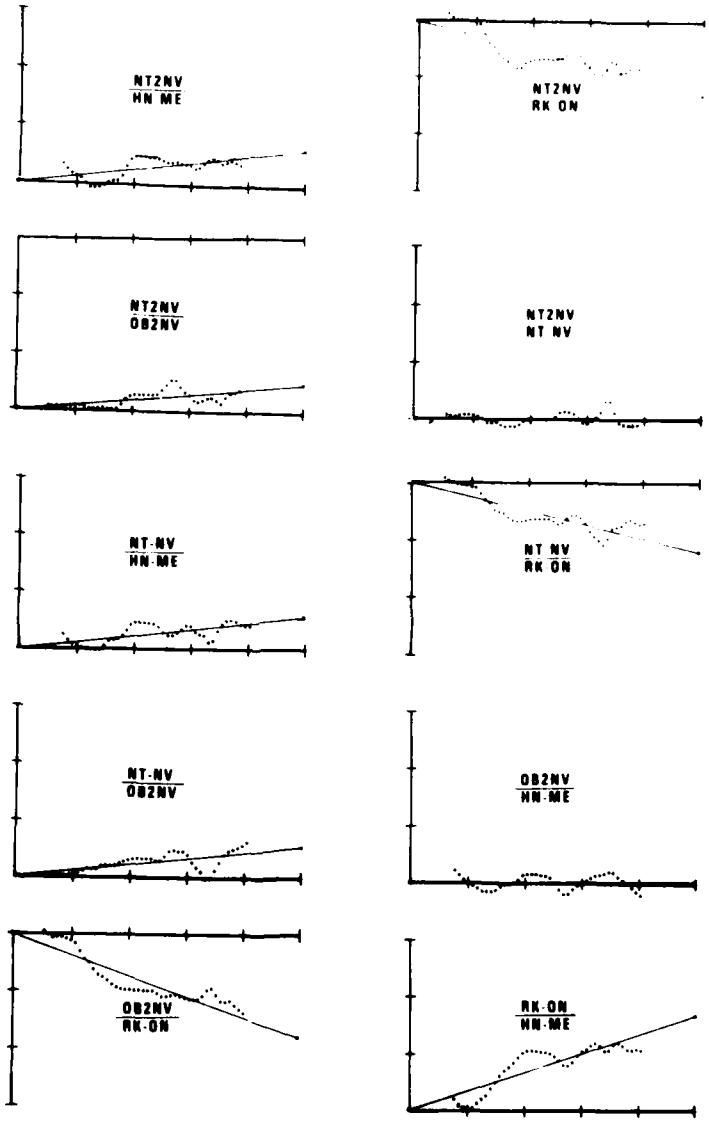


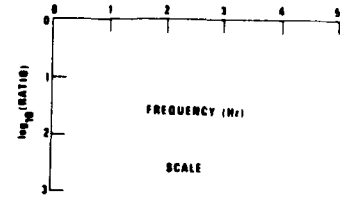

30 SEP 78

8 4 10 9

CHILE-ARGENTINA BDR

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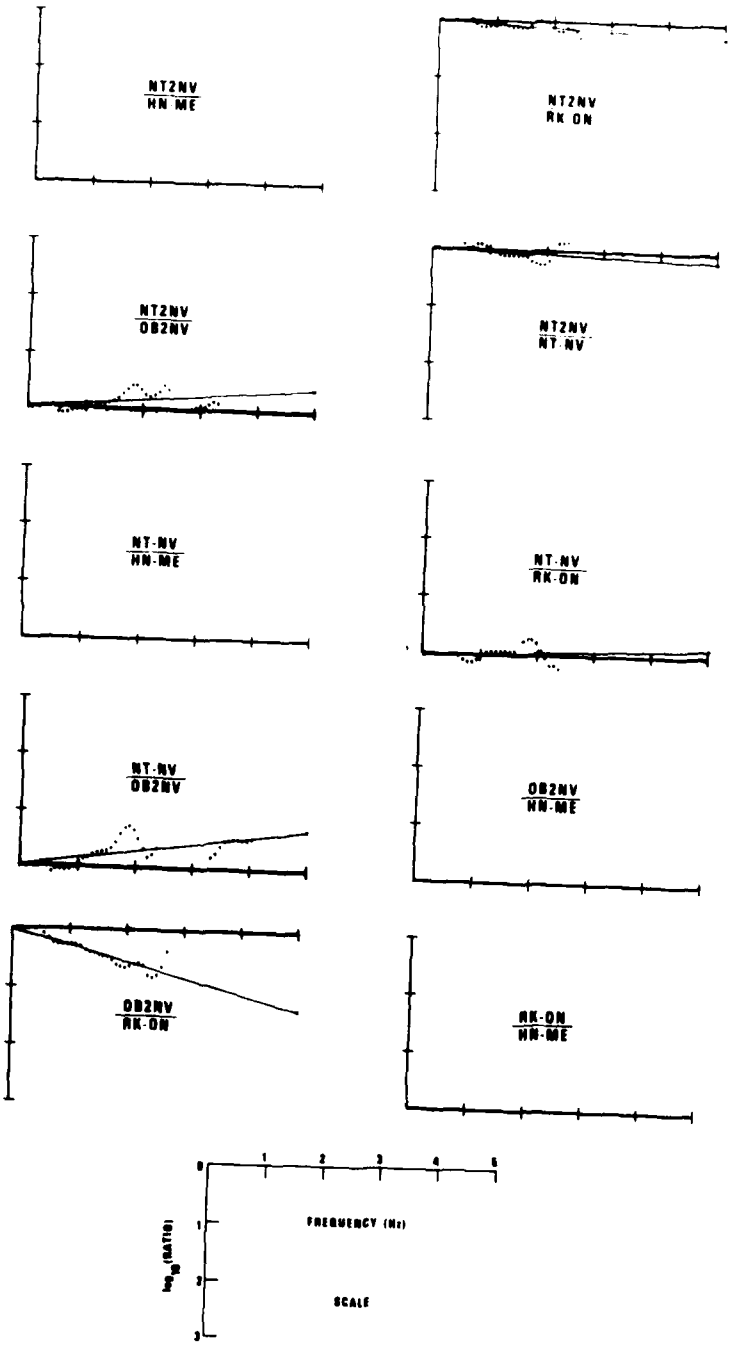

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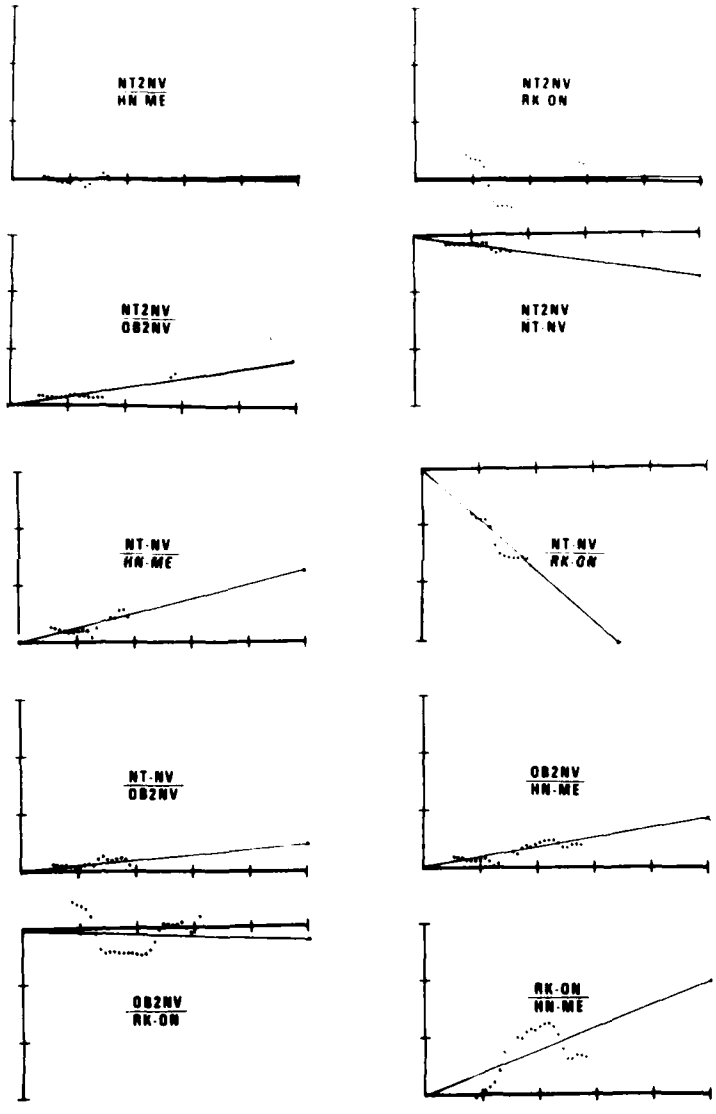


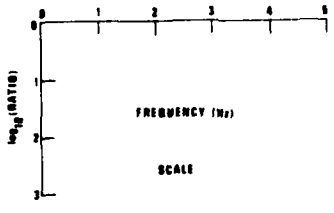

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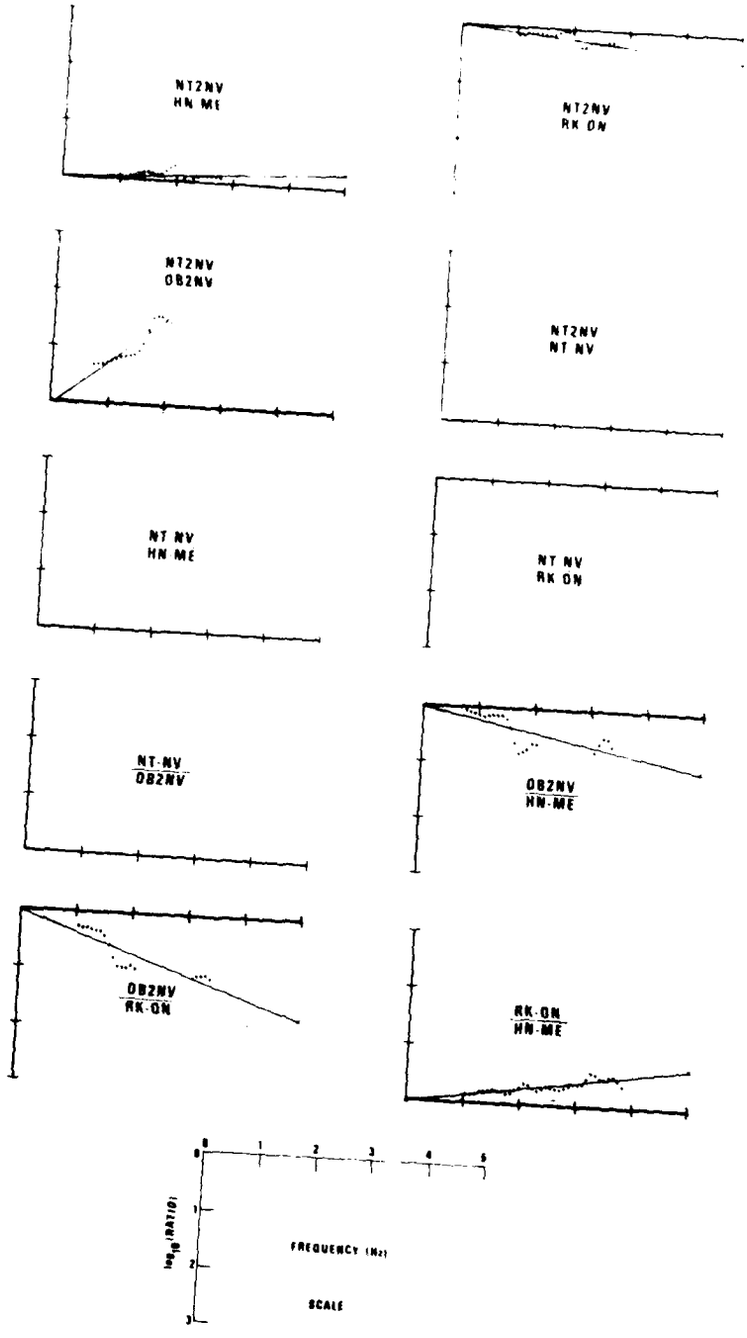

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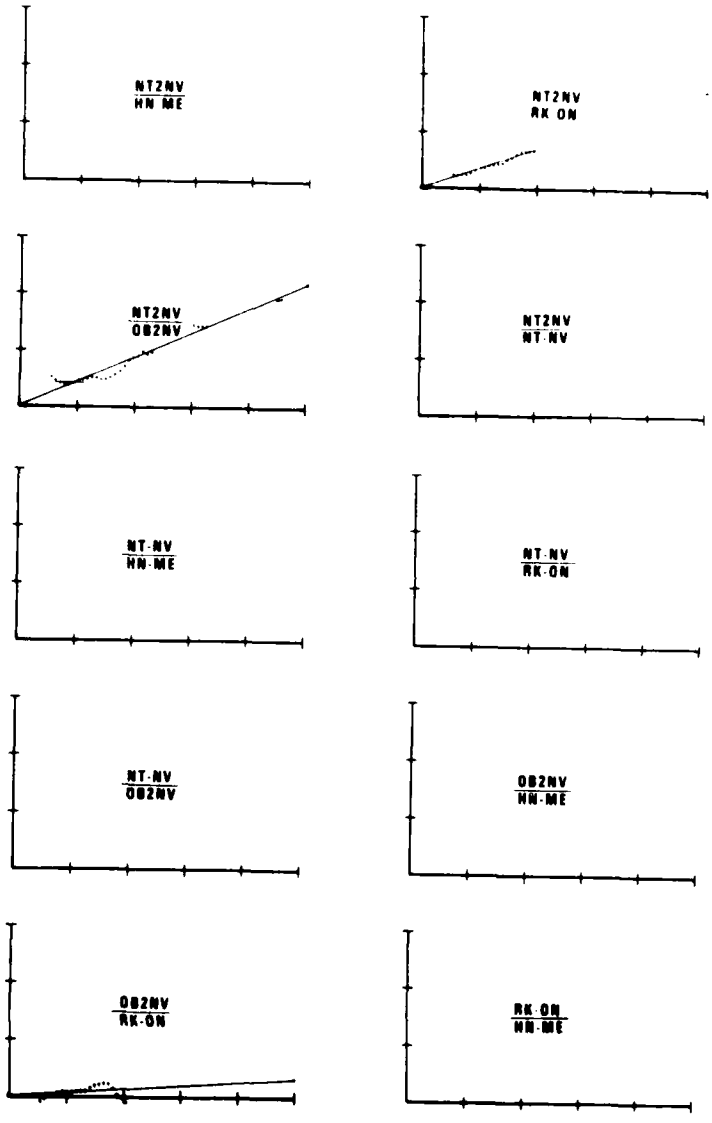


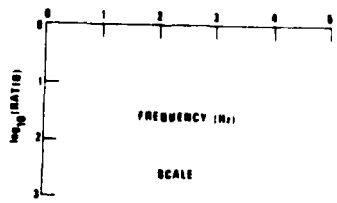

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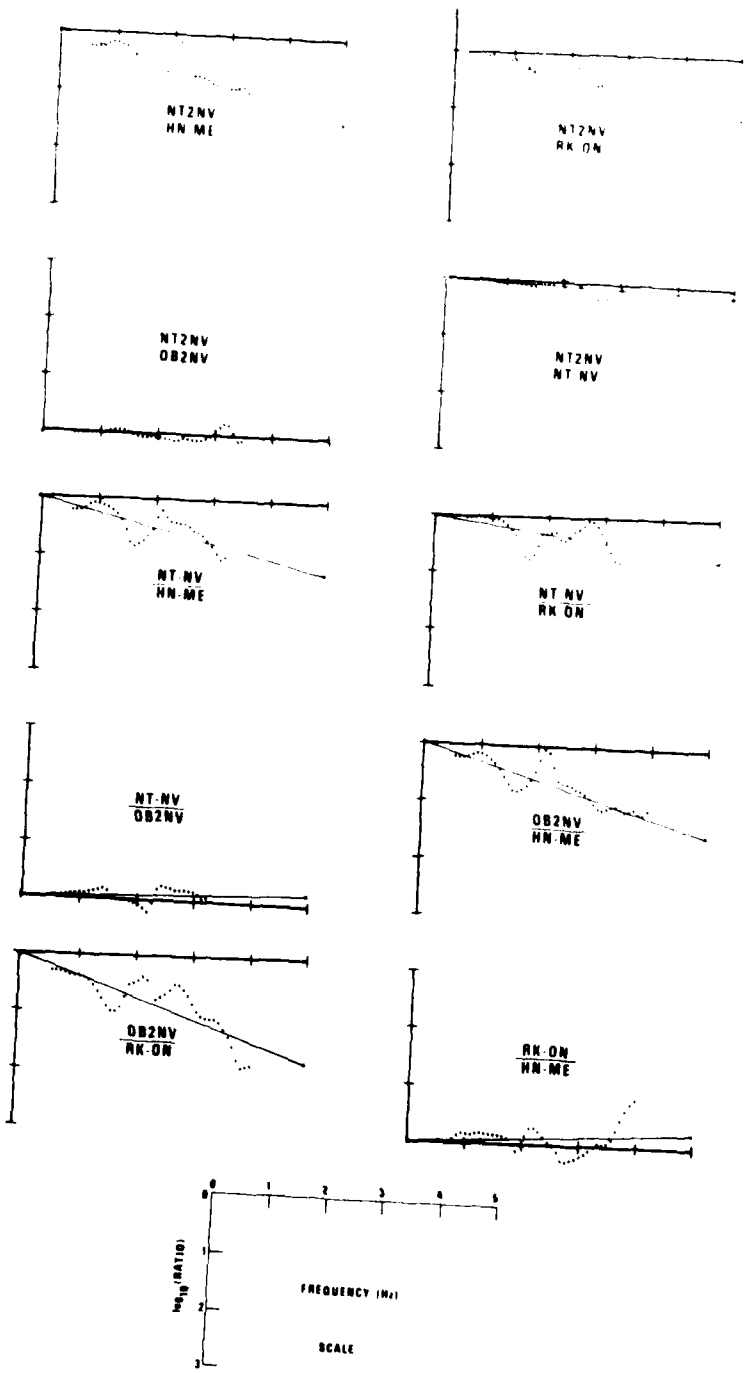

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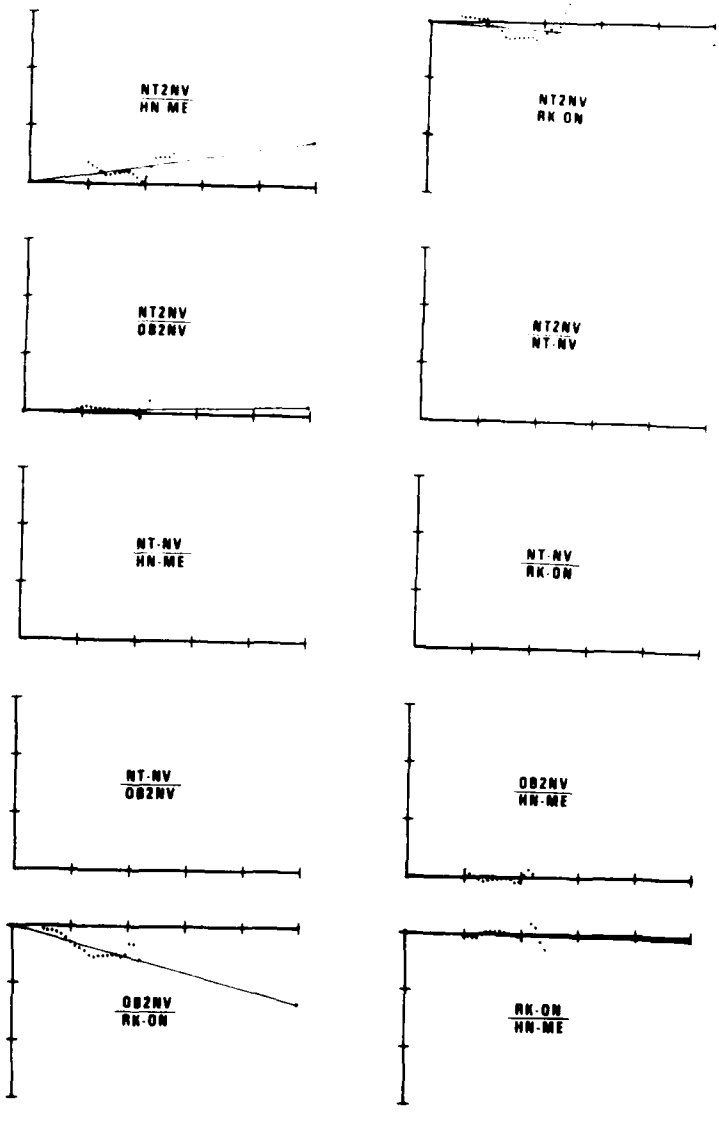


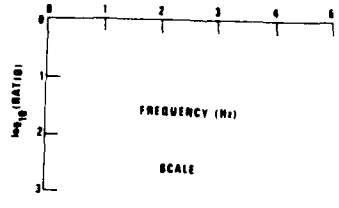

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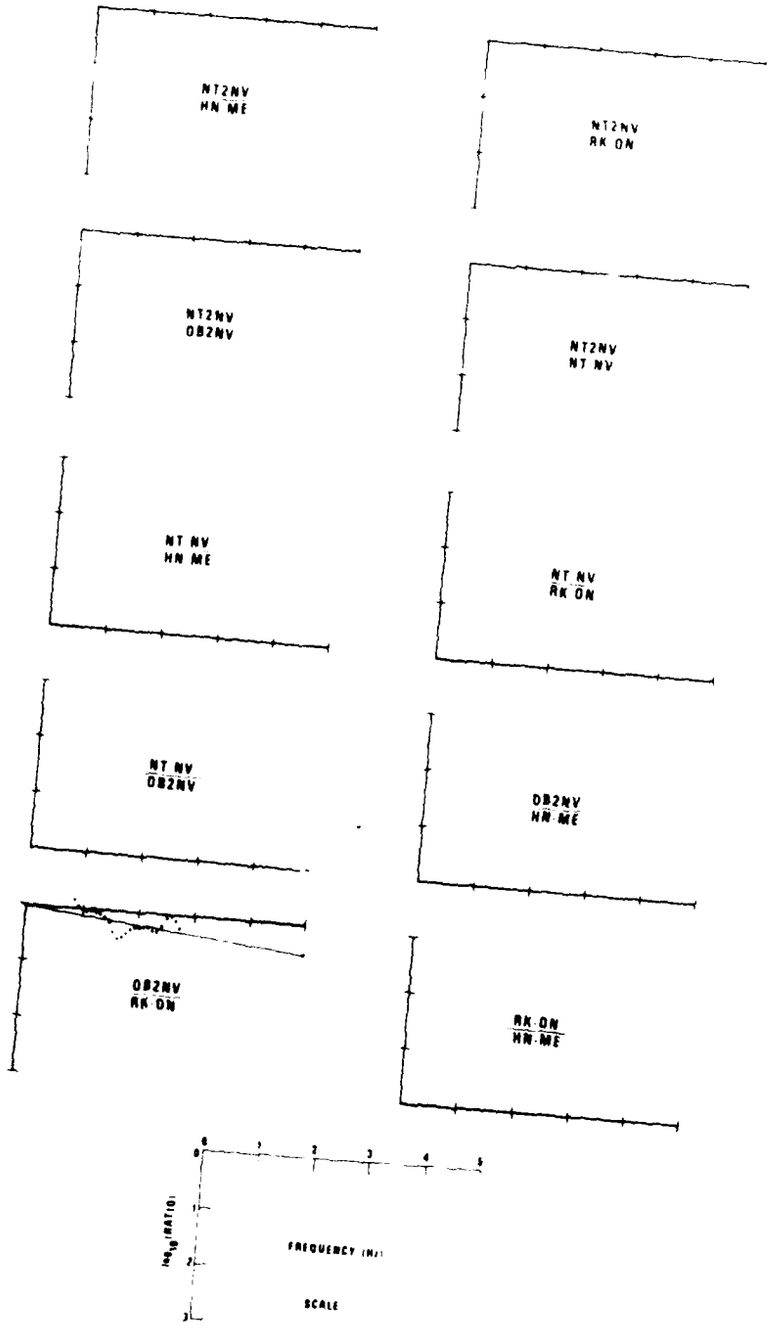

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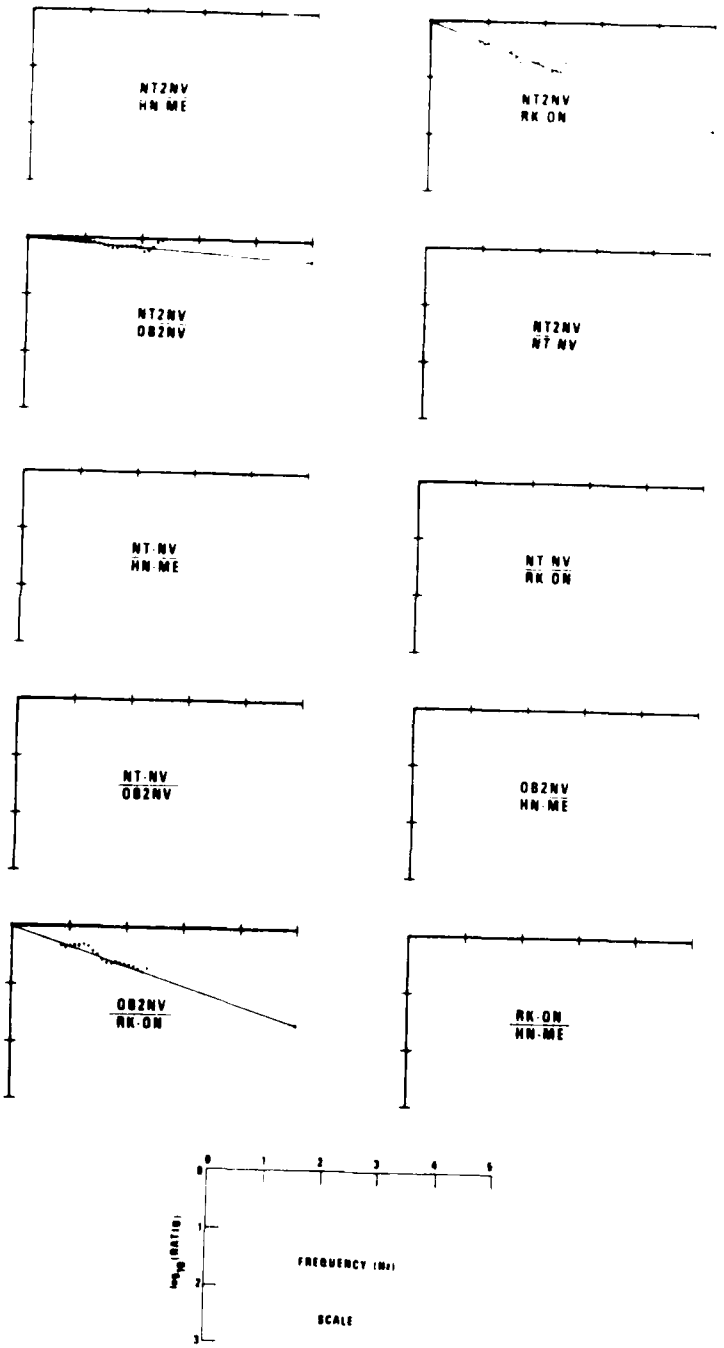

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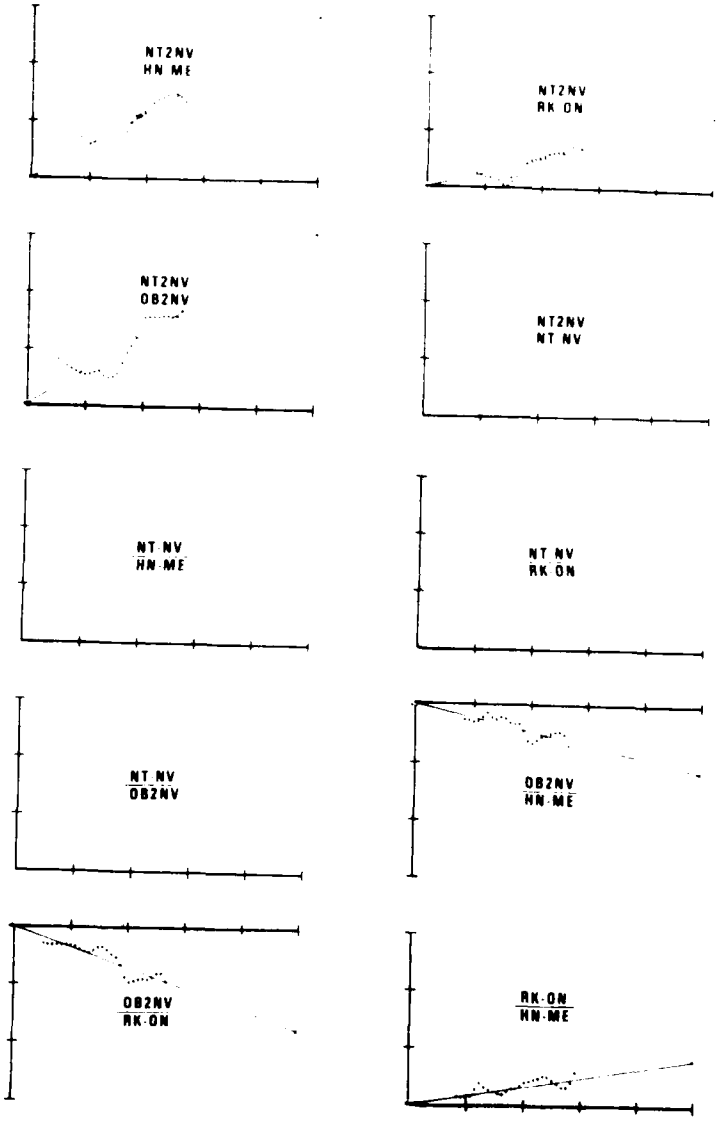


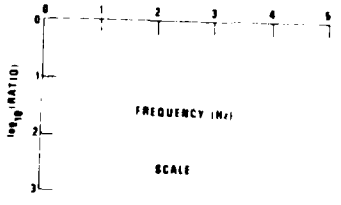

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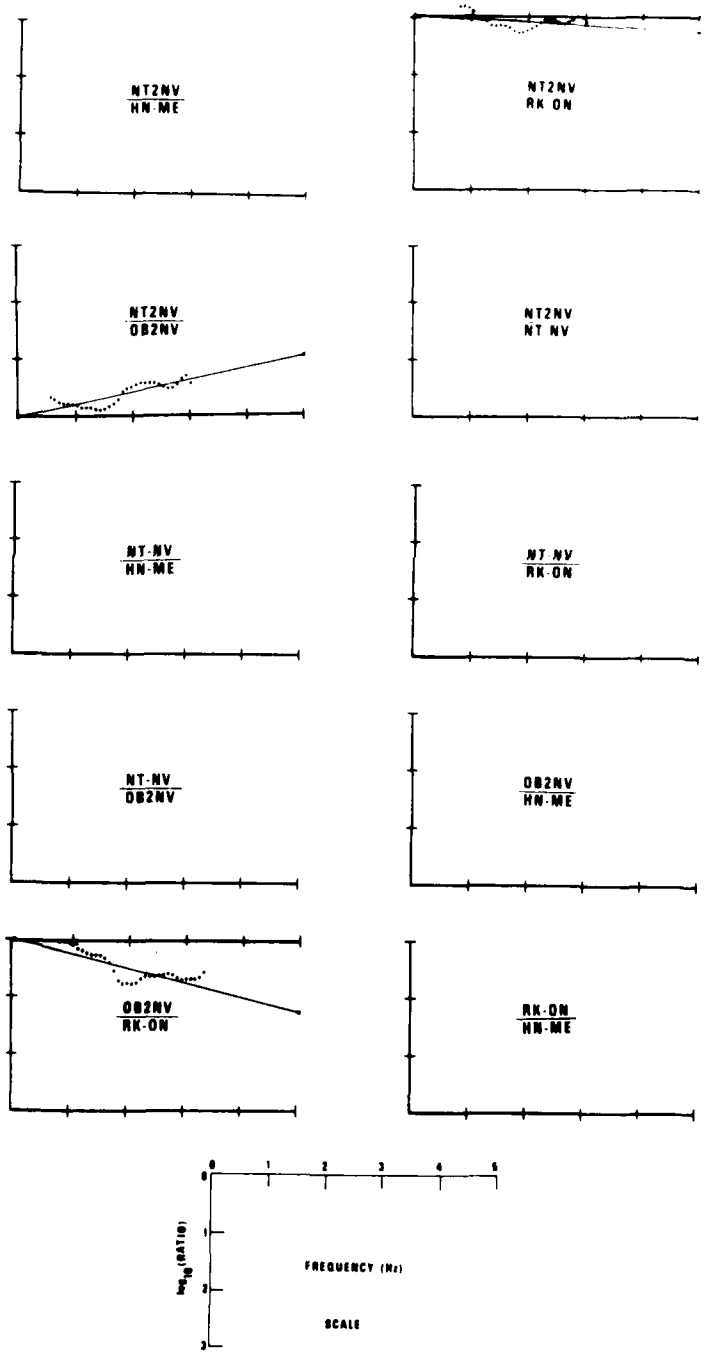

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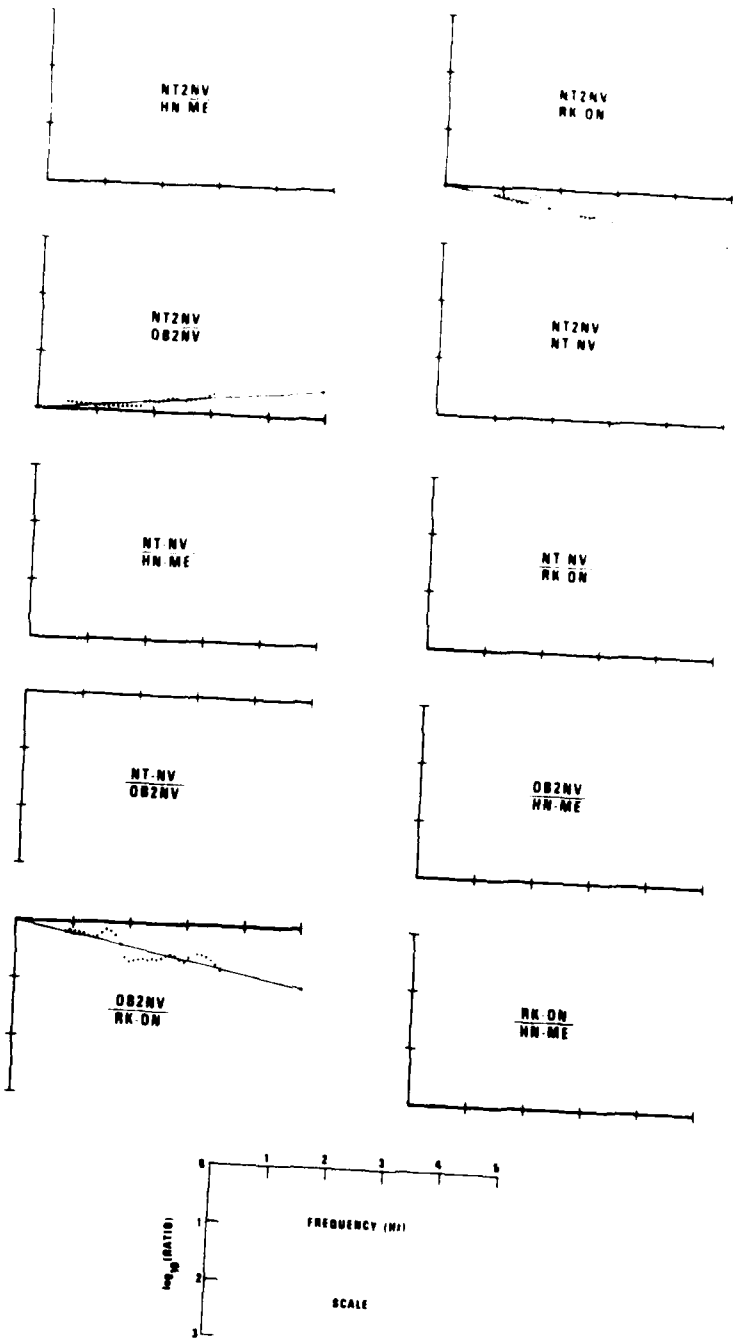

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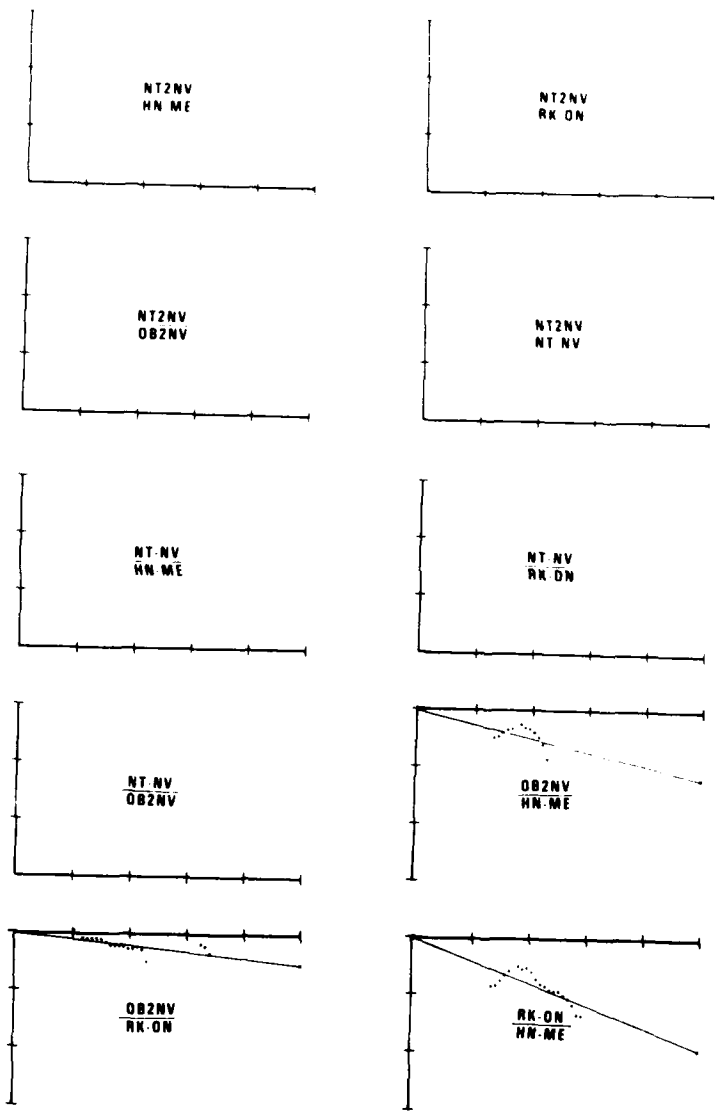


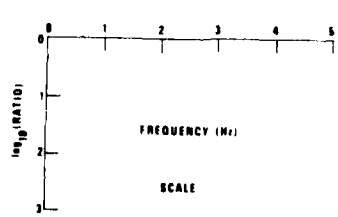

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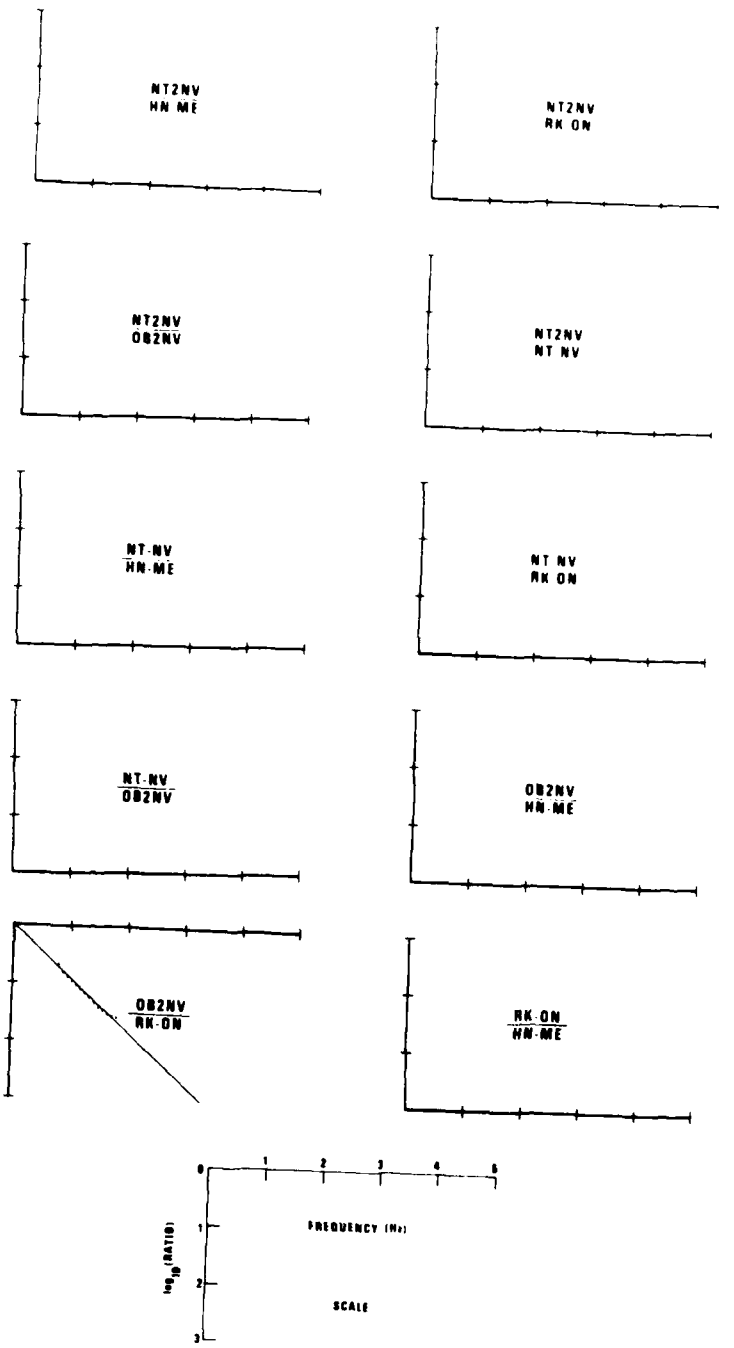

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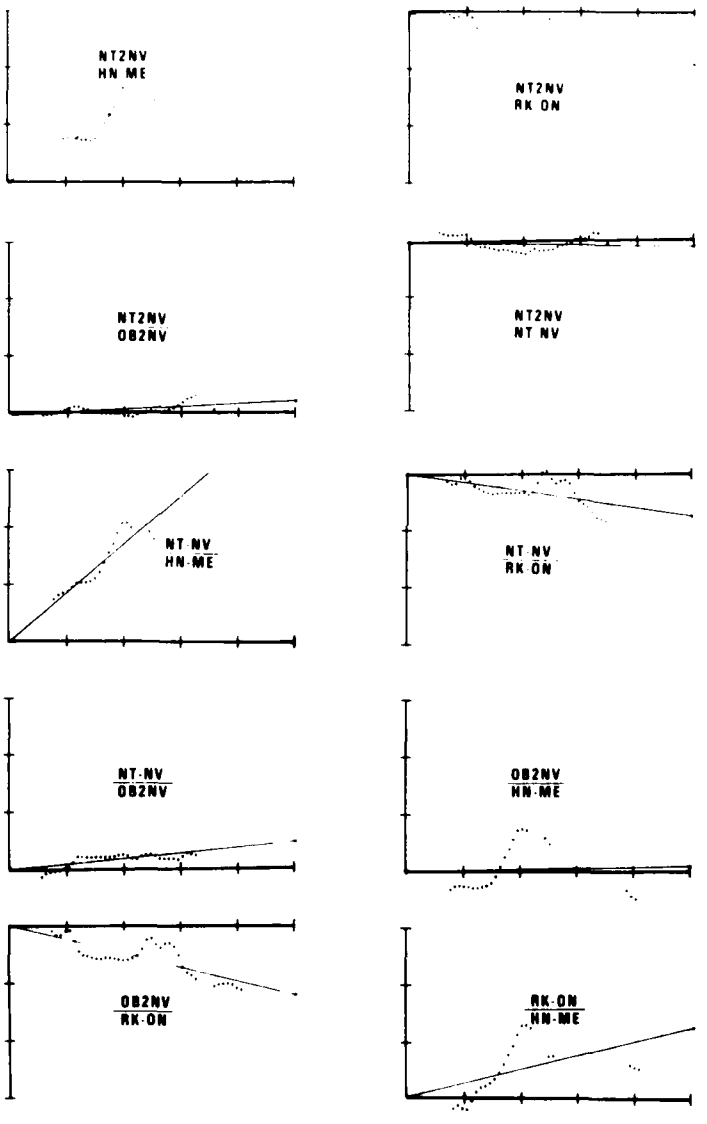


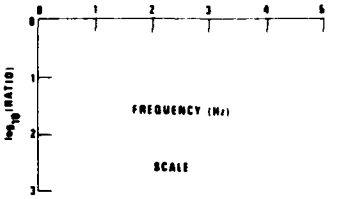

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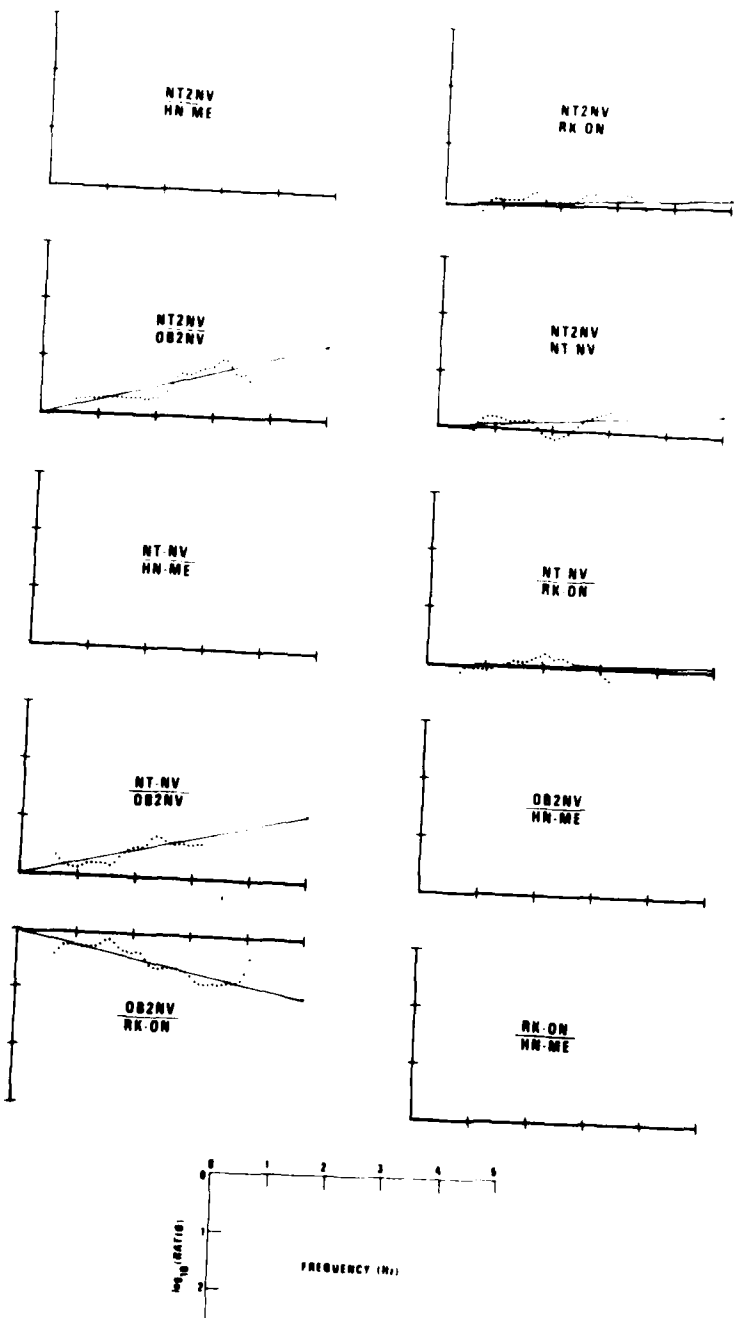

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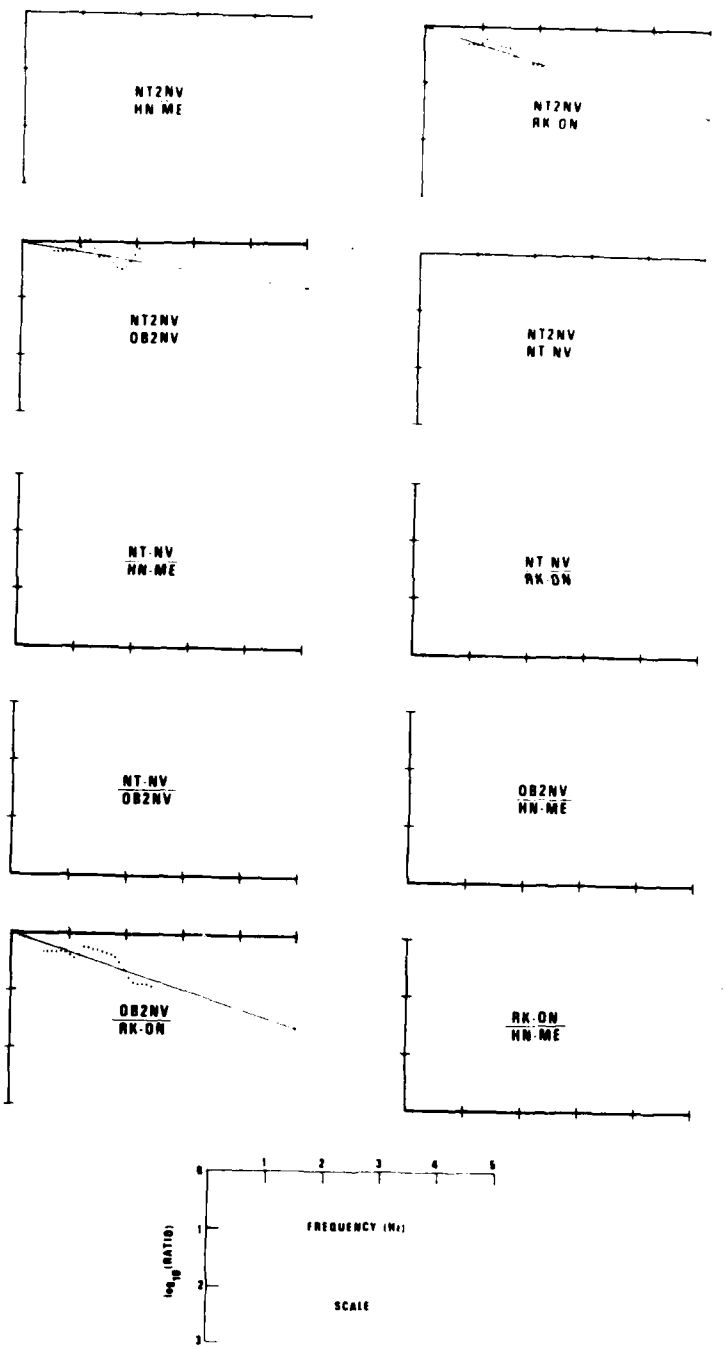

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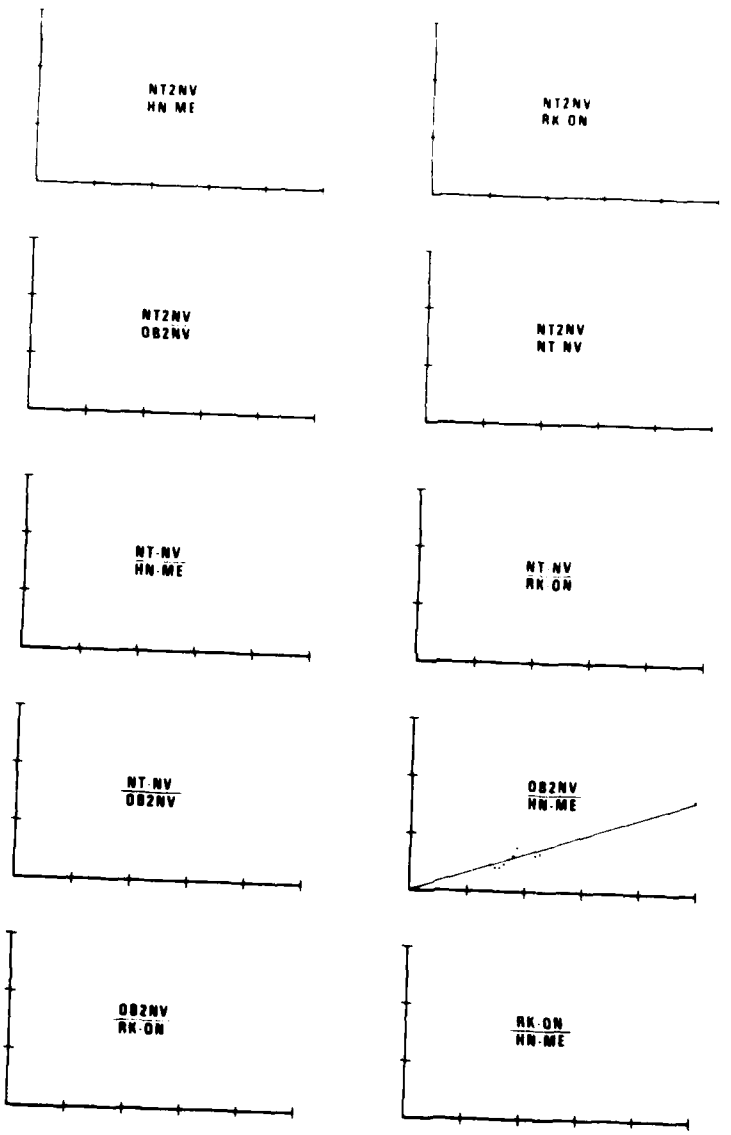


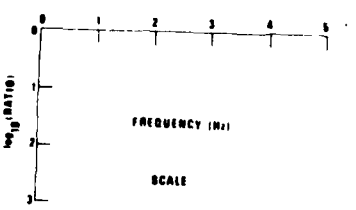

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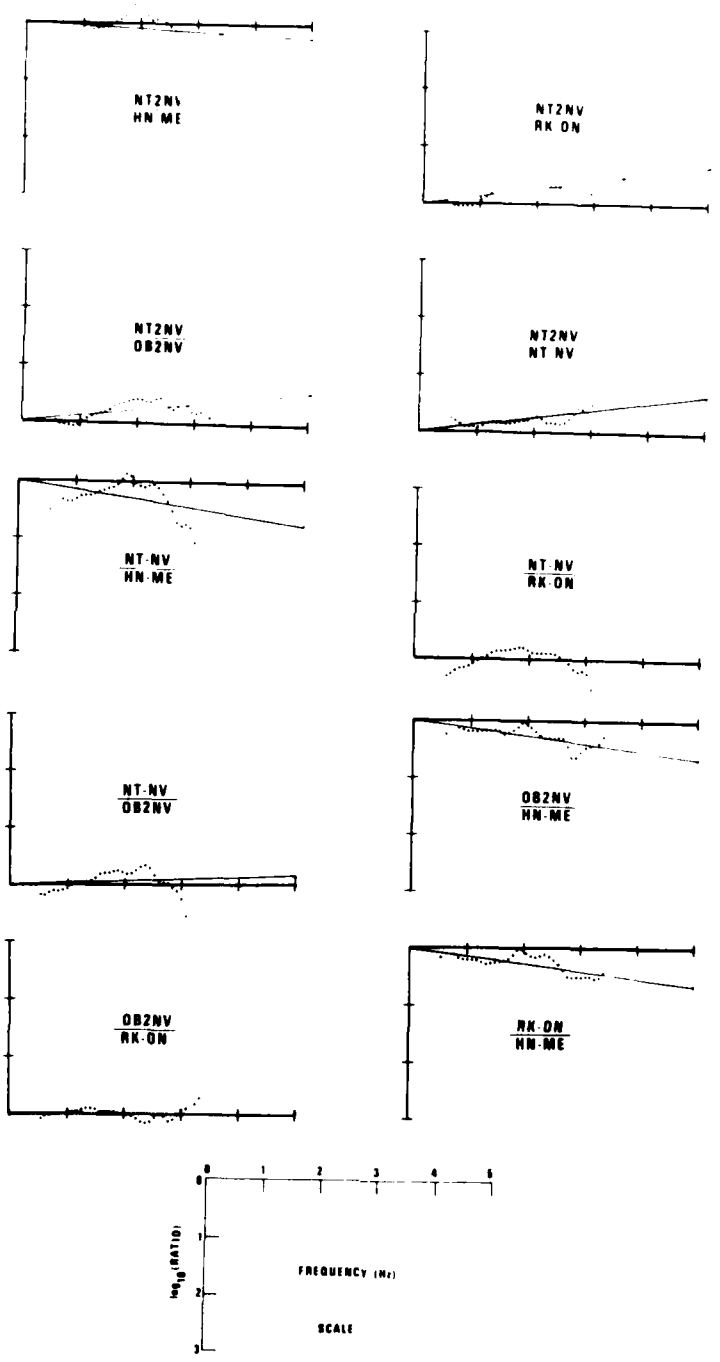

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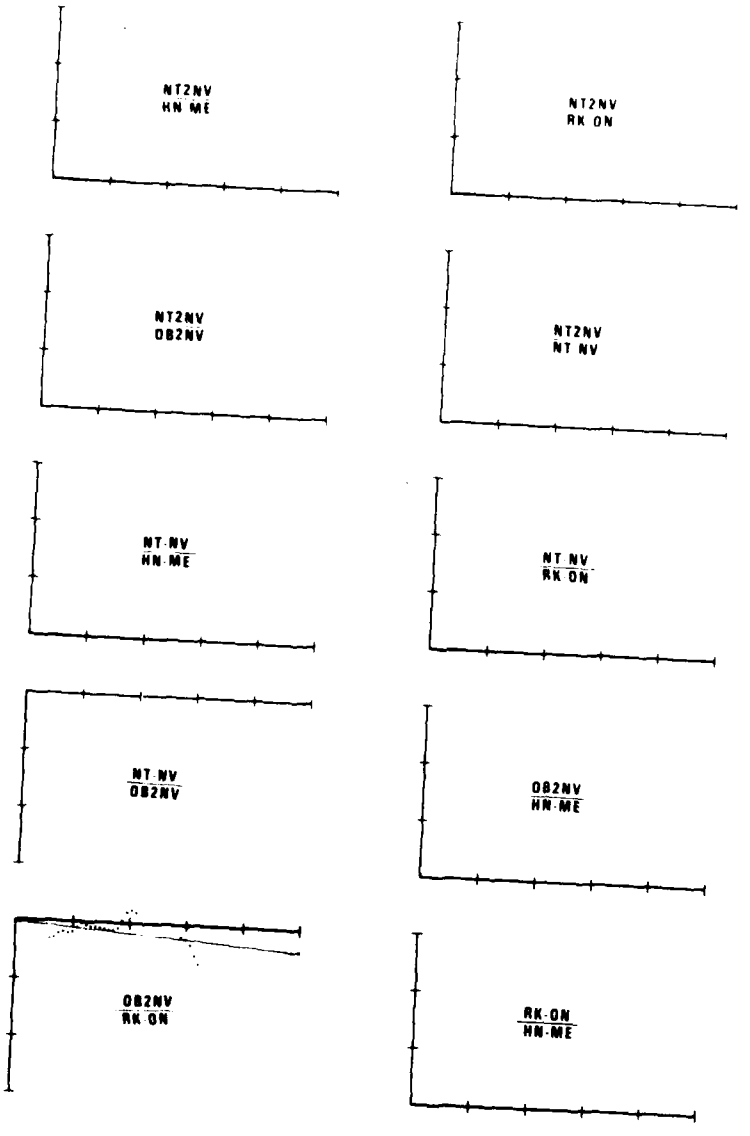


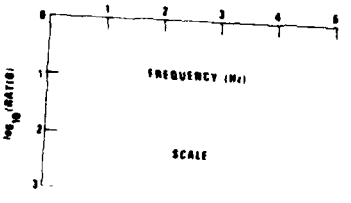

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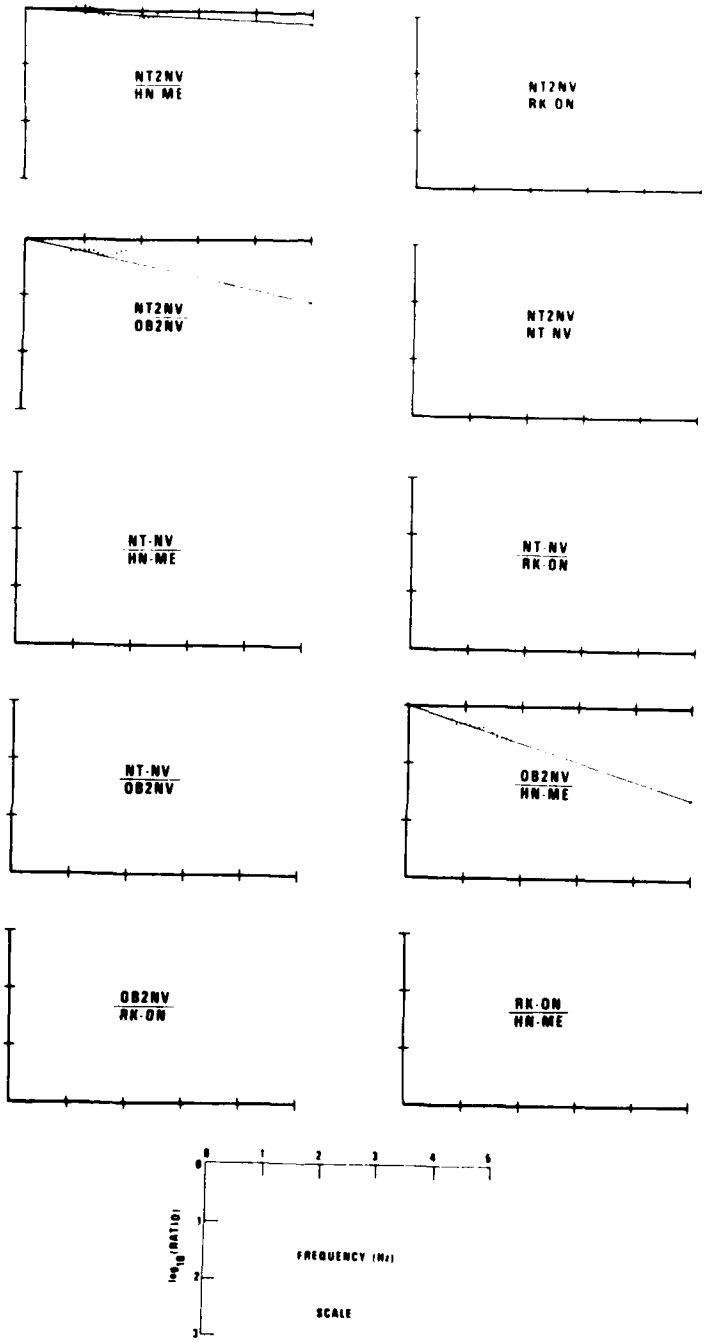

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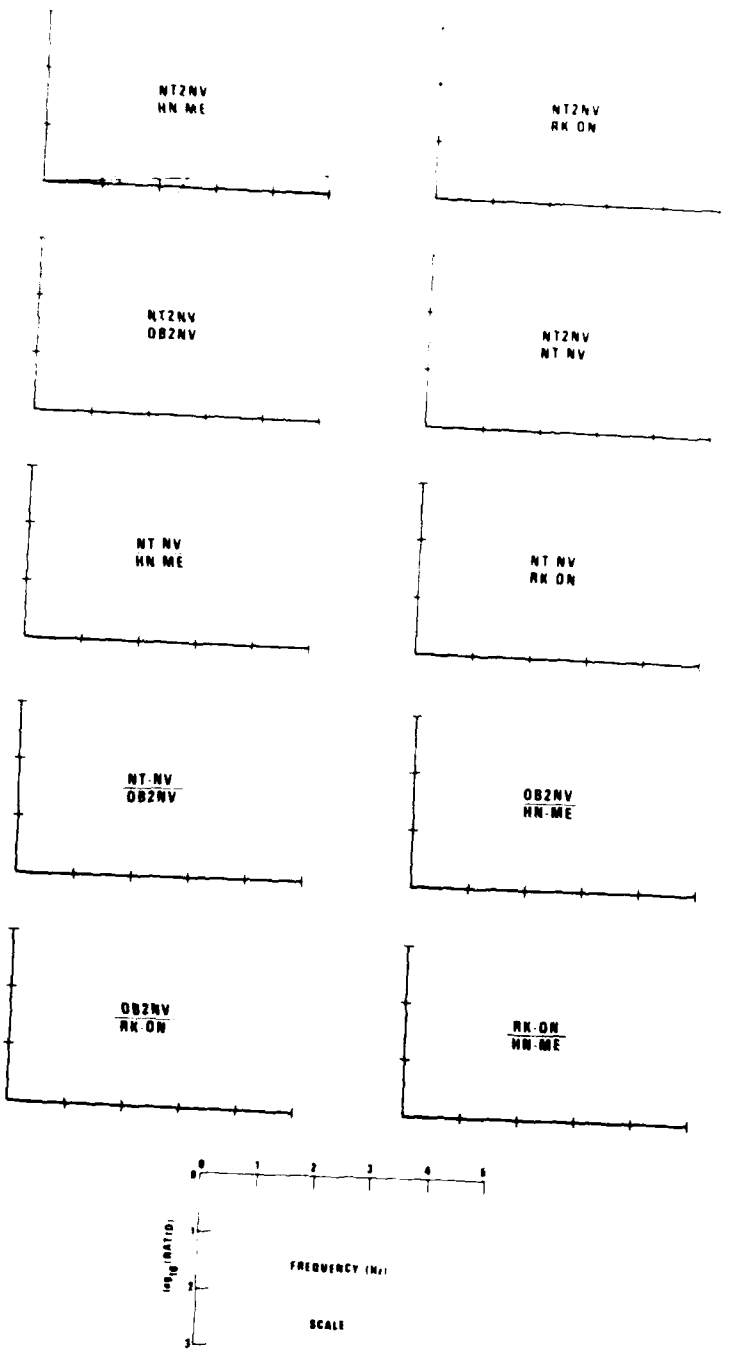

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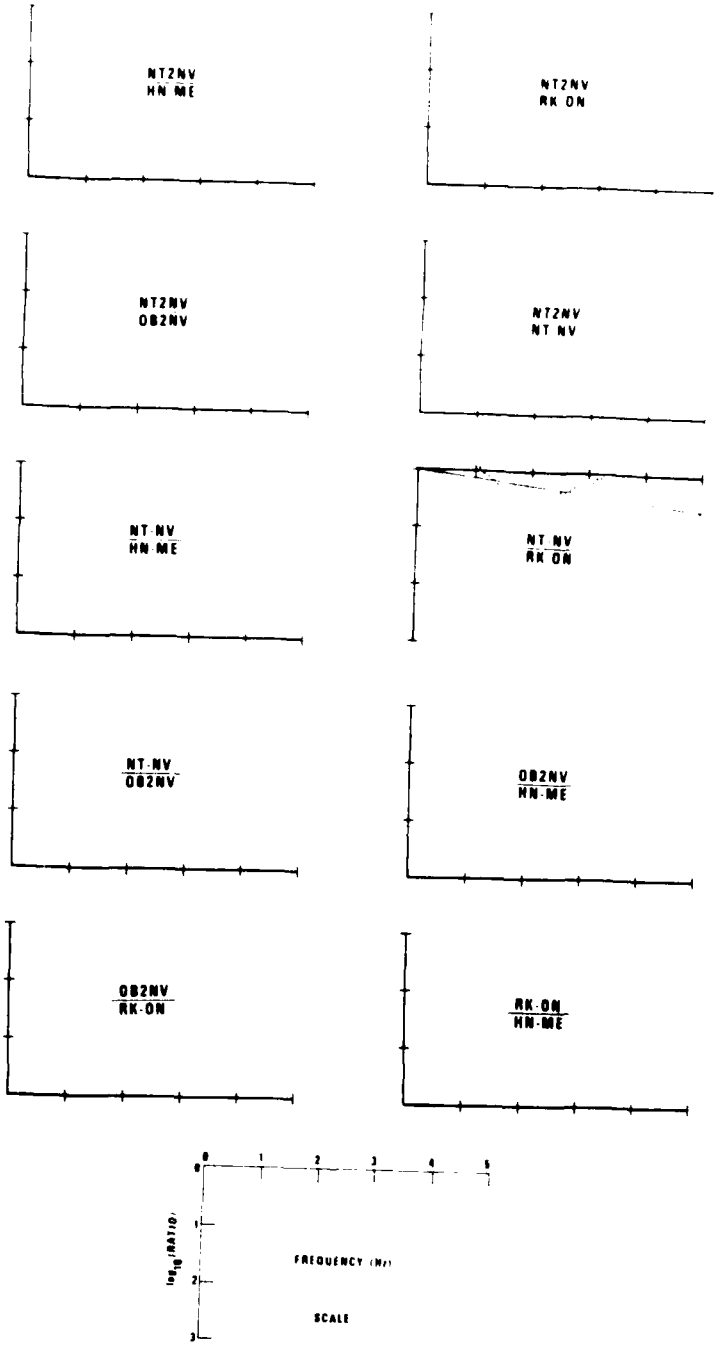

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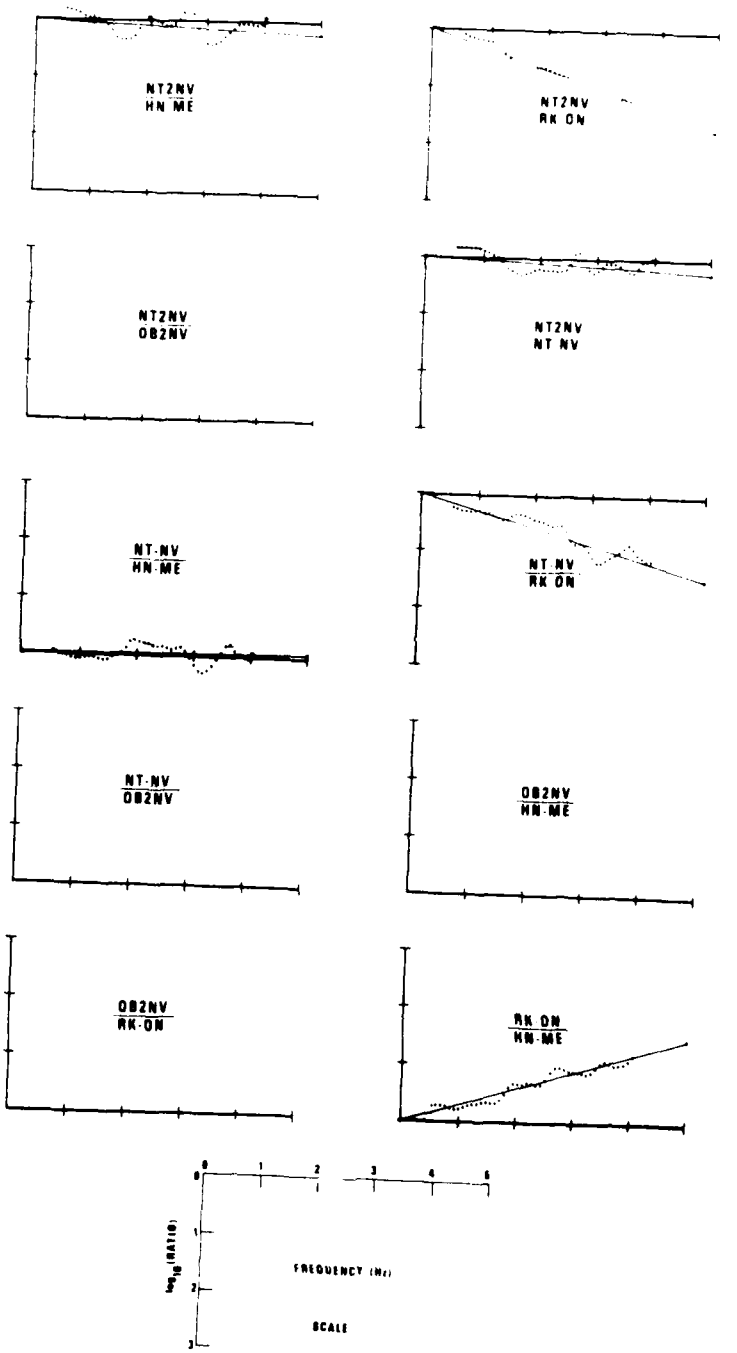

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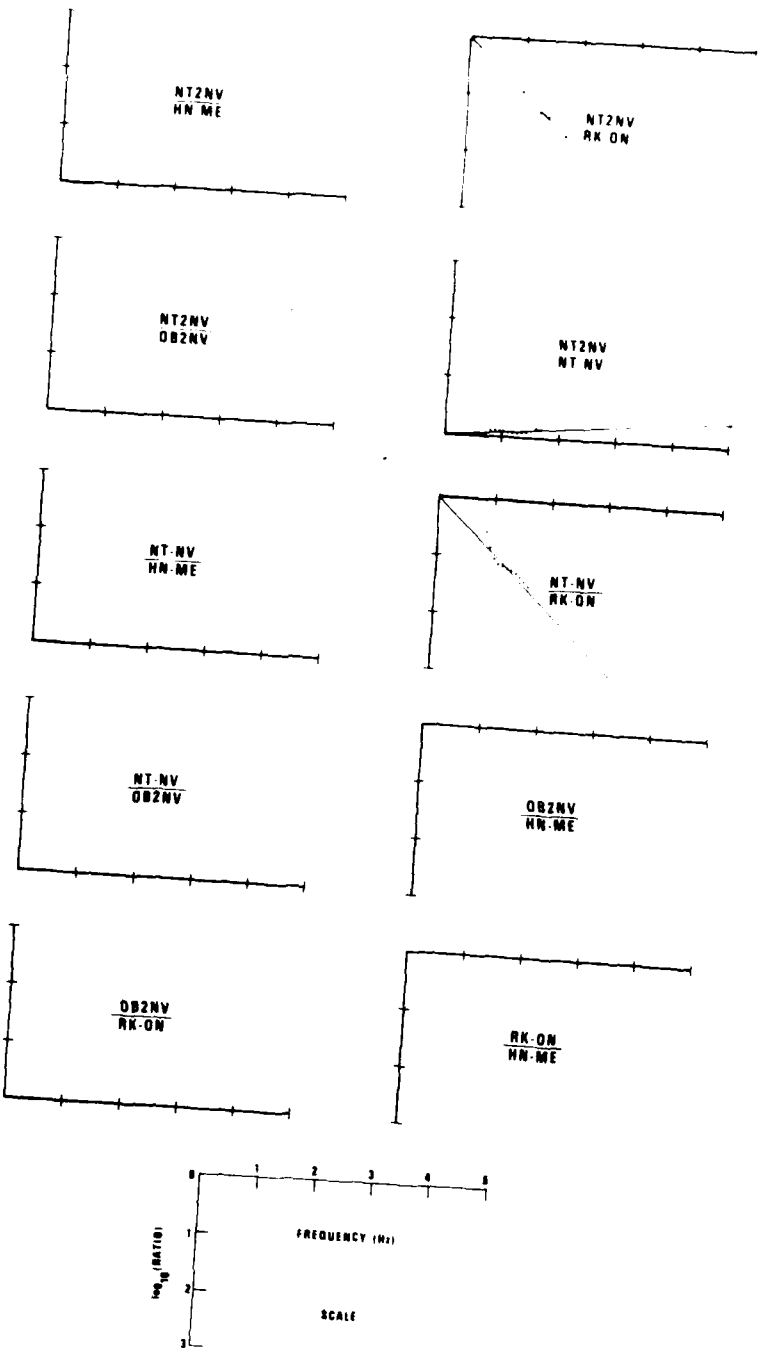

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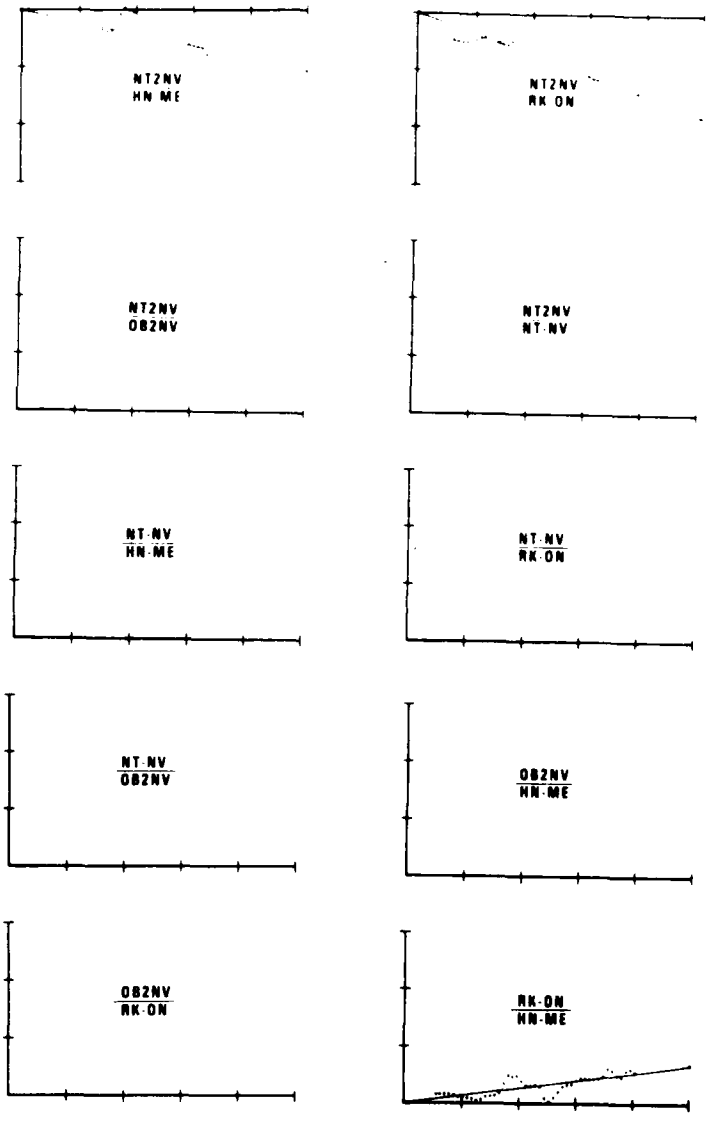
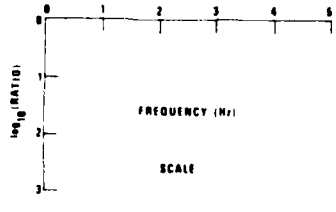
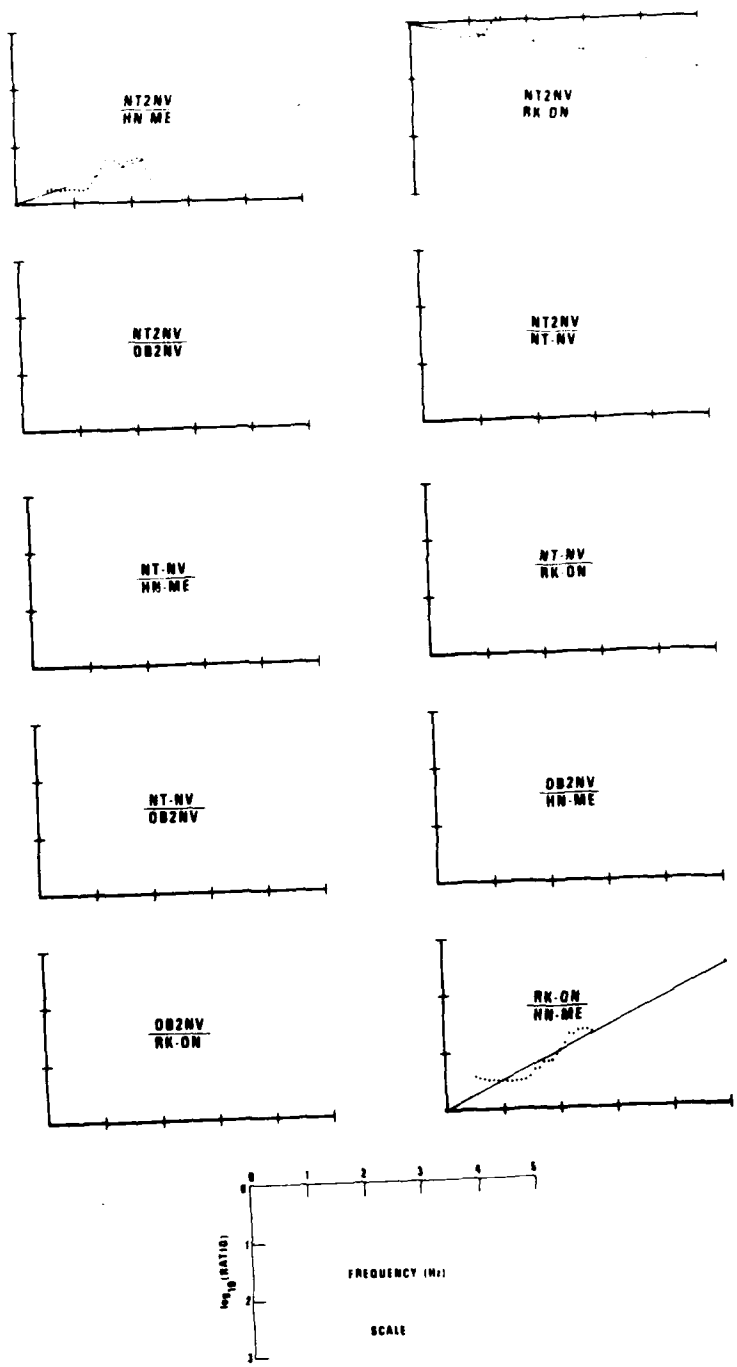
#D9



1 DEC 78
14 15 33 2
COSTA RICA
#55

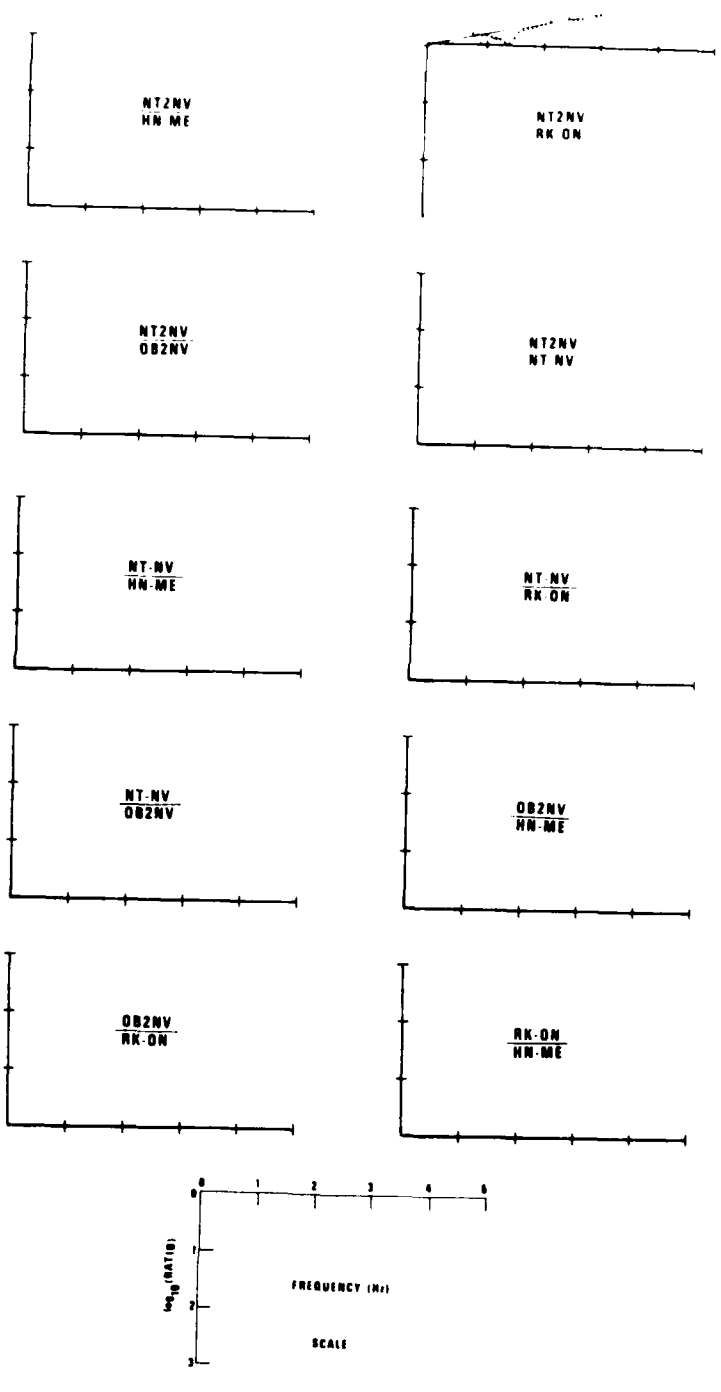


1 DEC 76

17 44 33 8

C AMERICAN COAST

#56

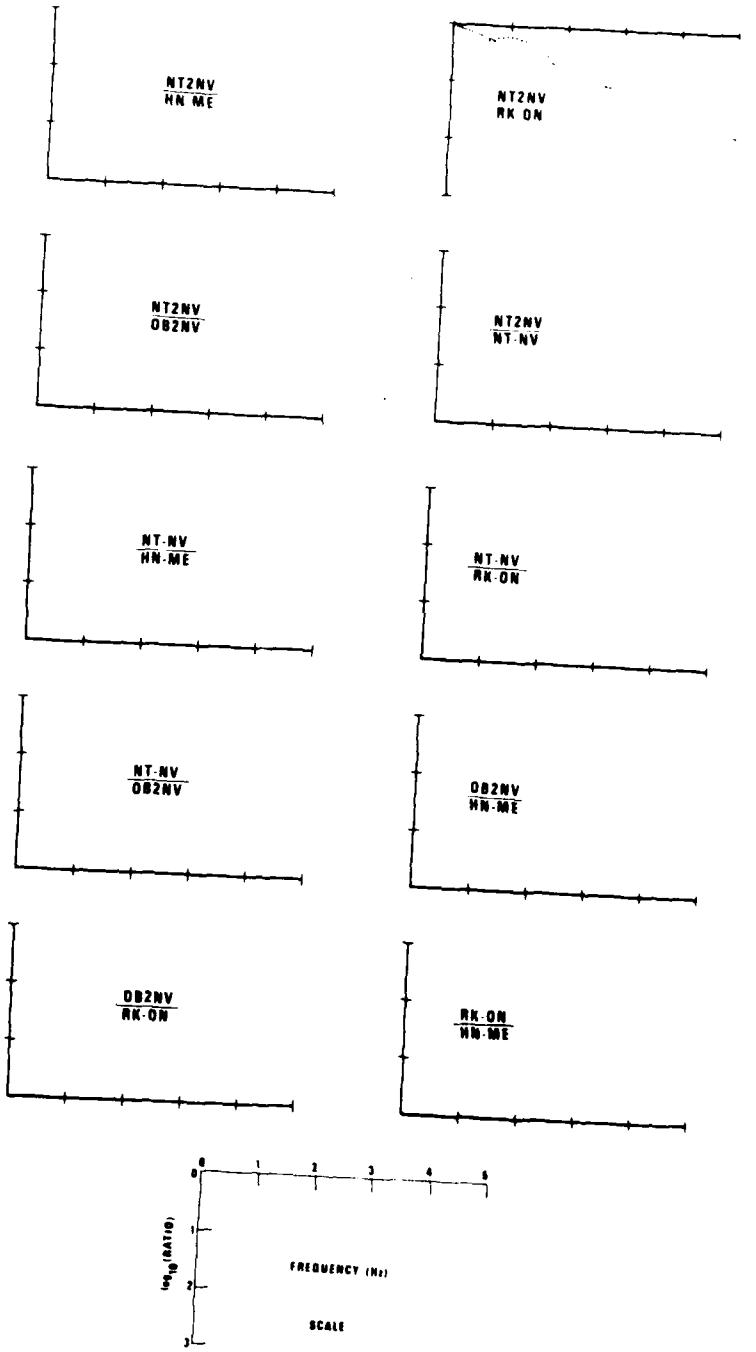


3 DEC 78

5 27 37 4

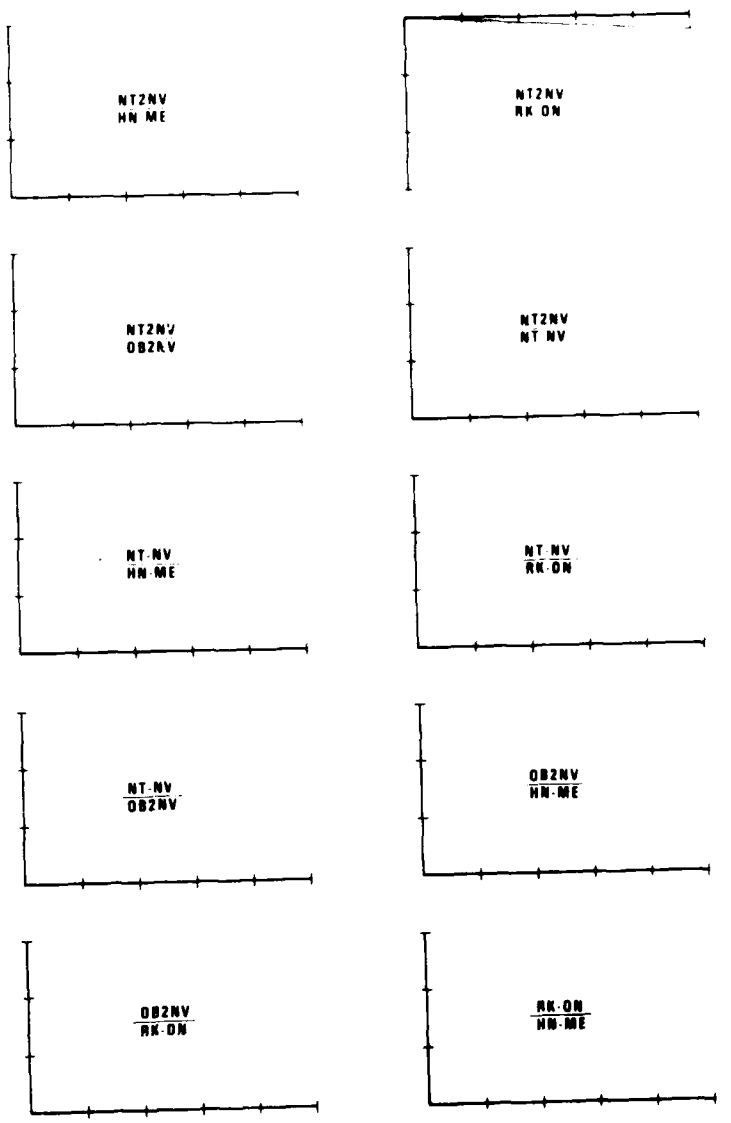
CHILE BOLIVIA BDR

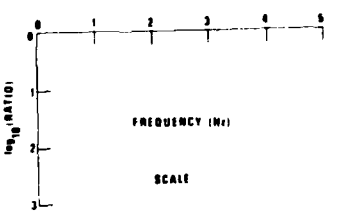
#57



3 DEC 76
23 10 23 1
N CHILE

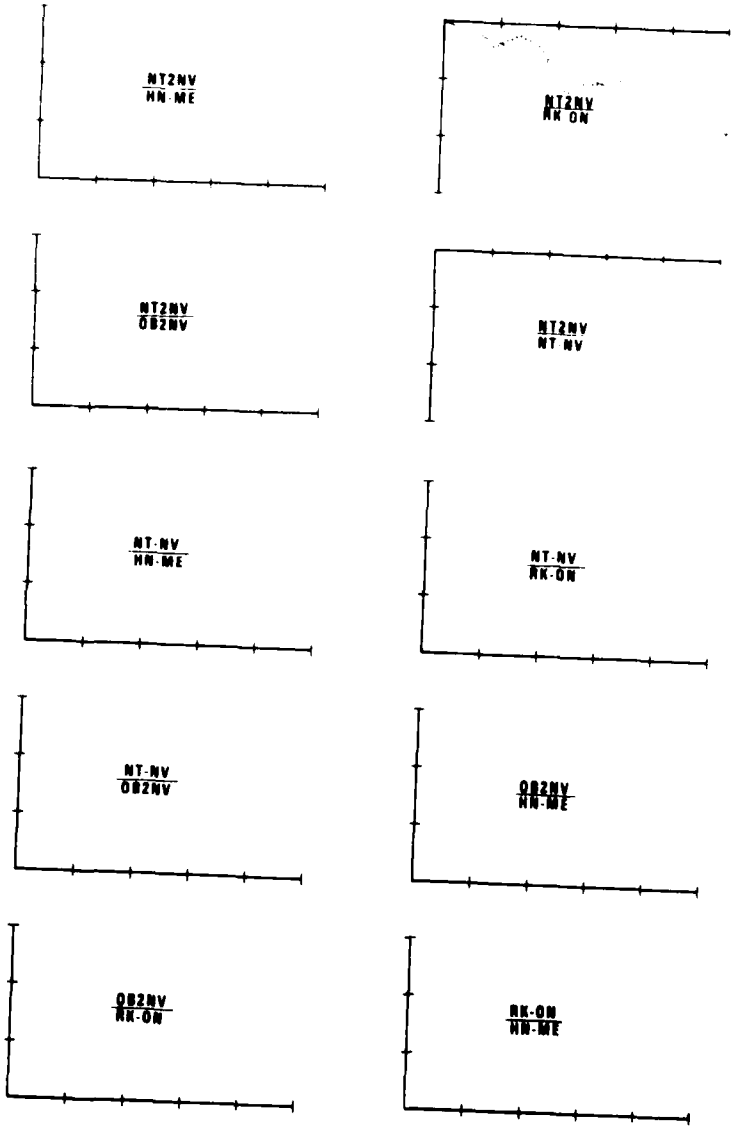
#58



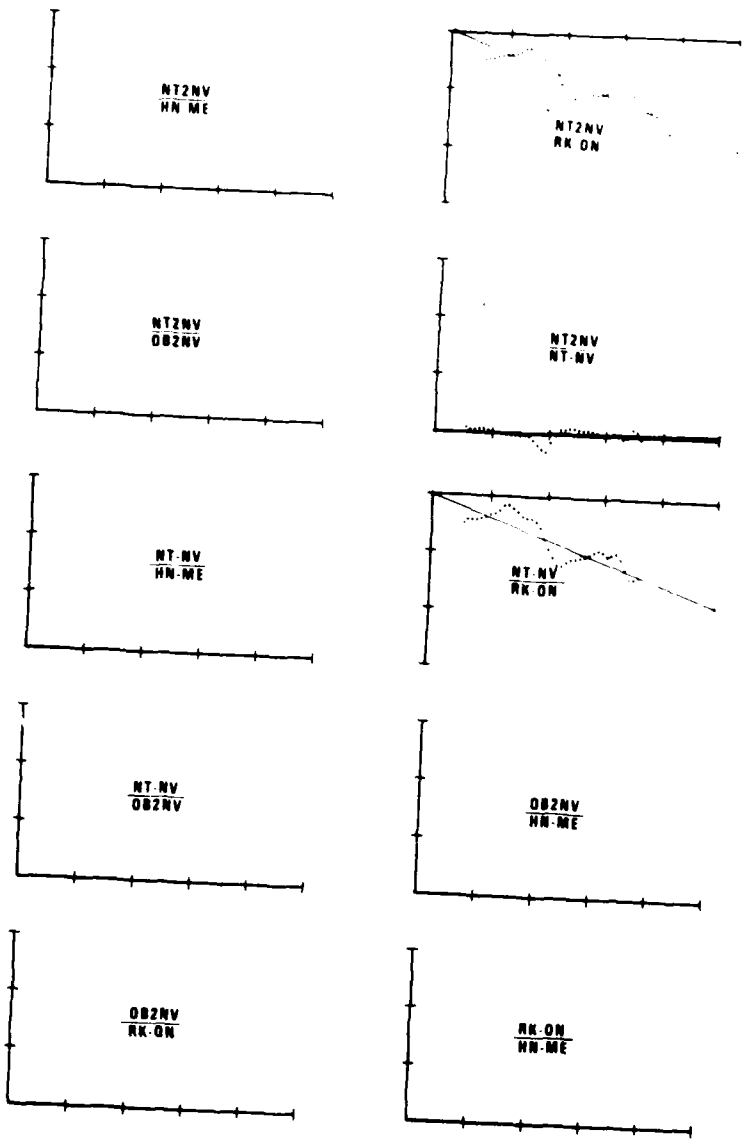
4 DEC 76
5 8 29 7
N CHILE

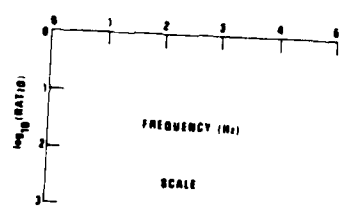
#60



4 DEC 78
12 32 35 4
N CHILE

#61



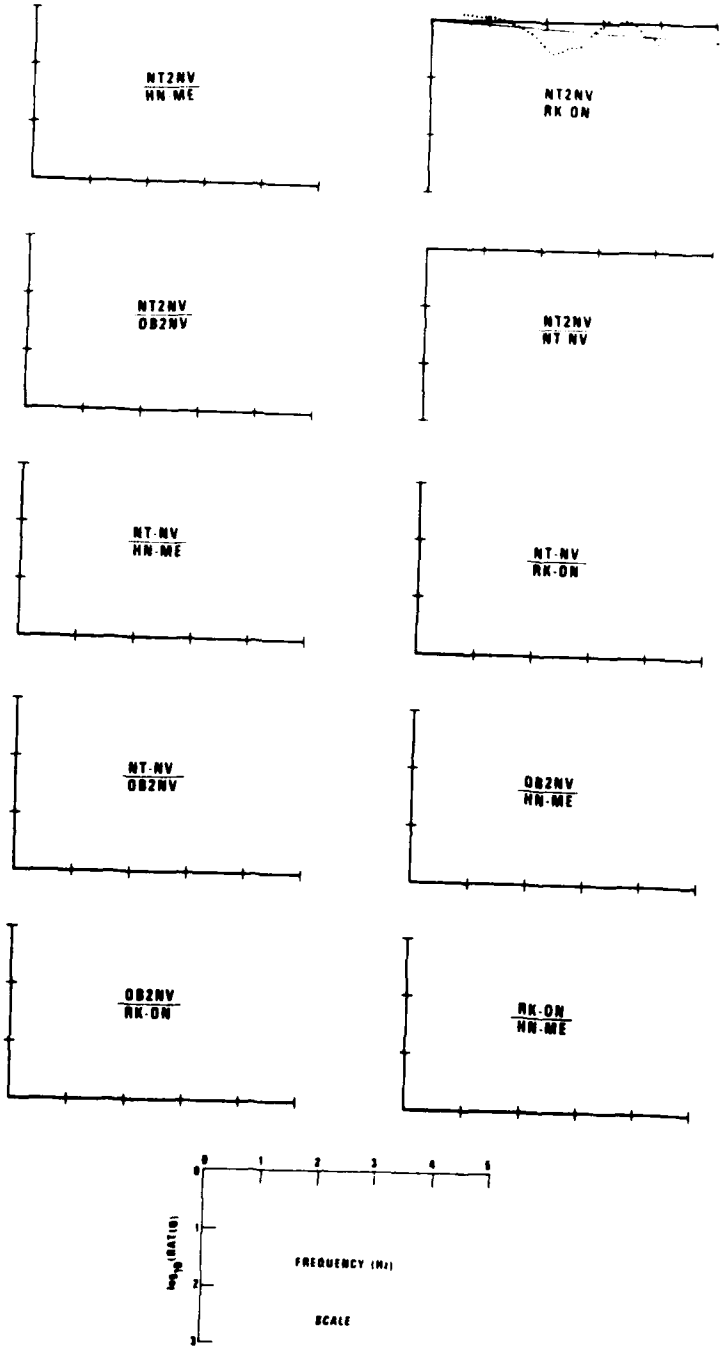



6 DEC 78

221221

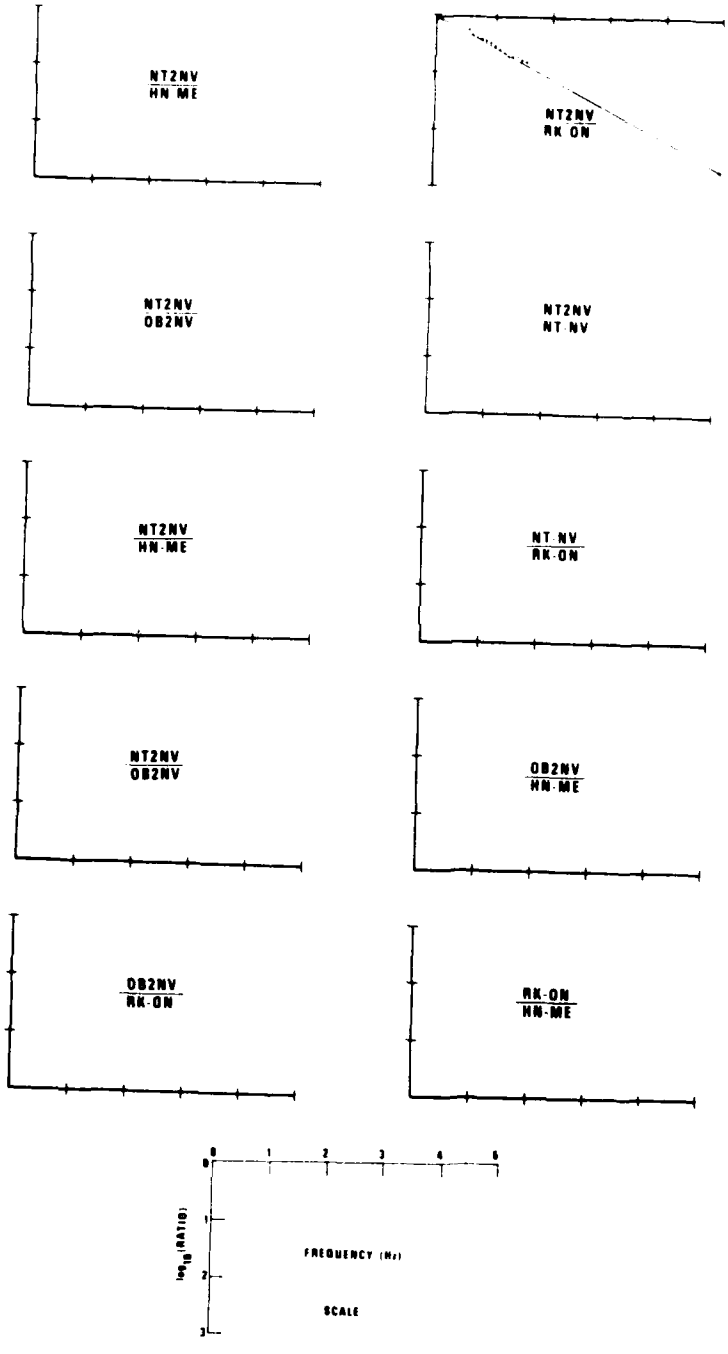
BONIN ISLAND

#62



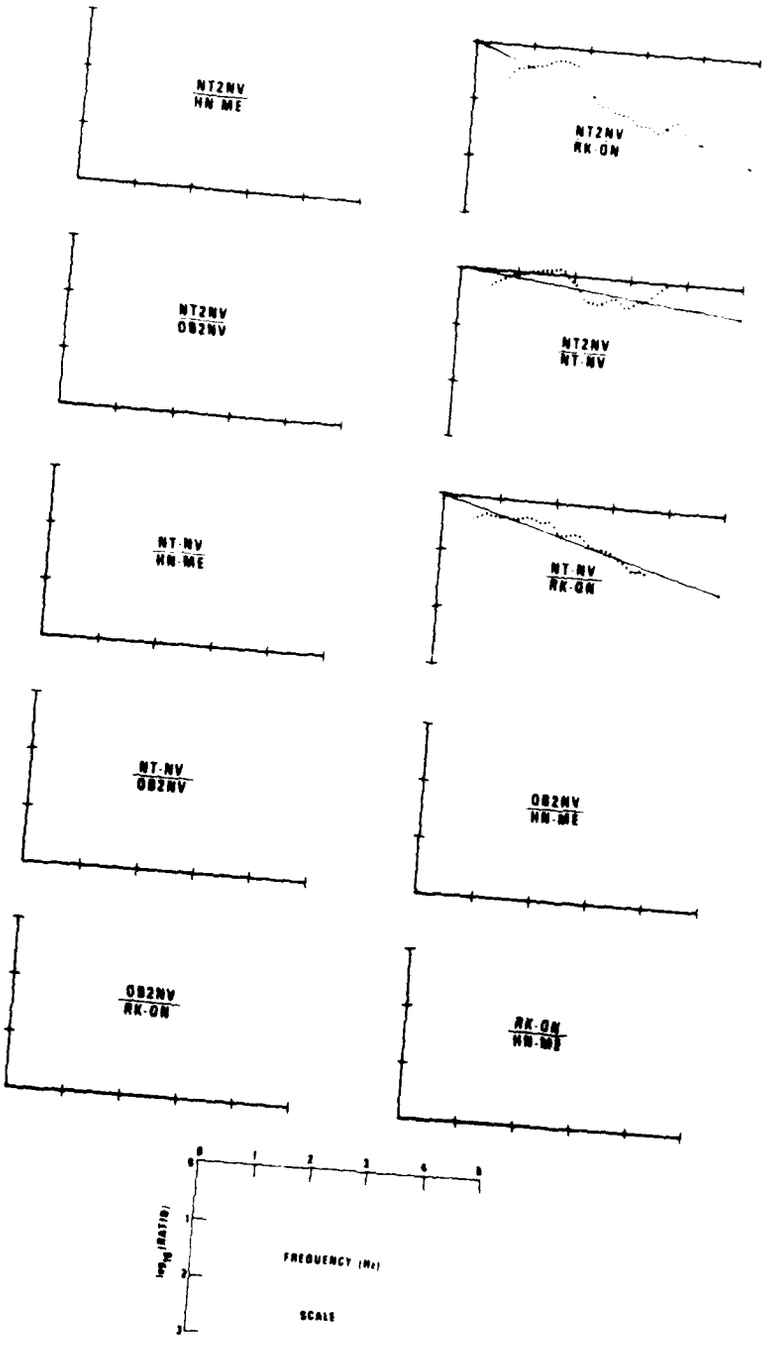
6 DEC 76
19 46 2 4
EASTER ISLAND

#63

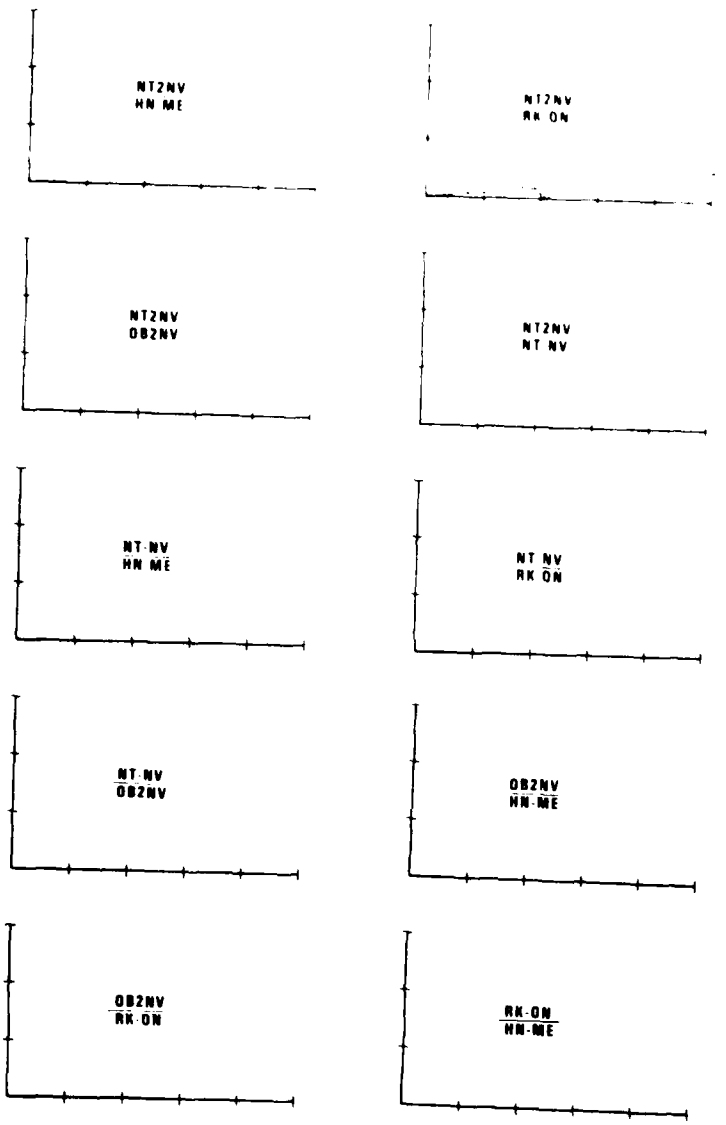


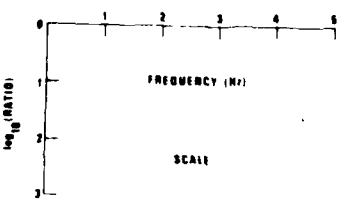
7 DEC 78
8 36 41 4
JAPAN

#64

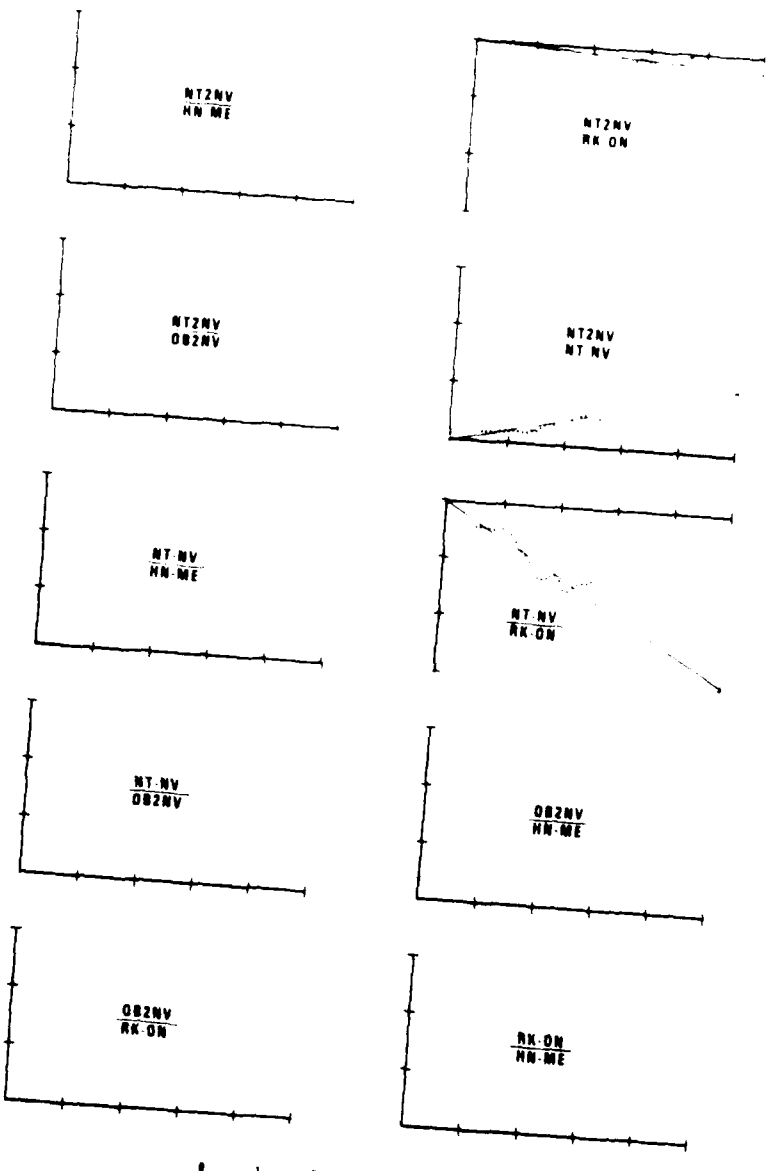


13 DEC 76
23 12 8 0
N PACIFIC
#75

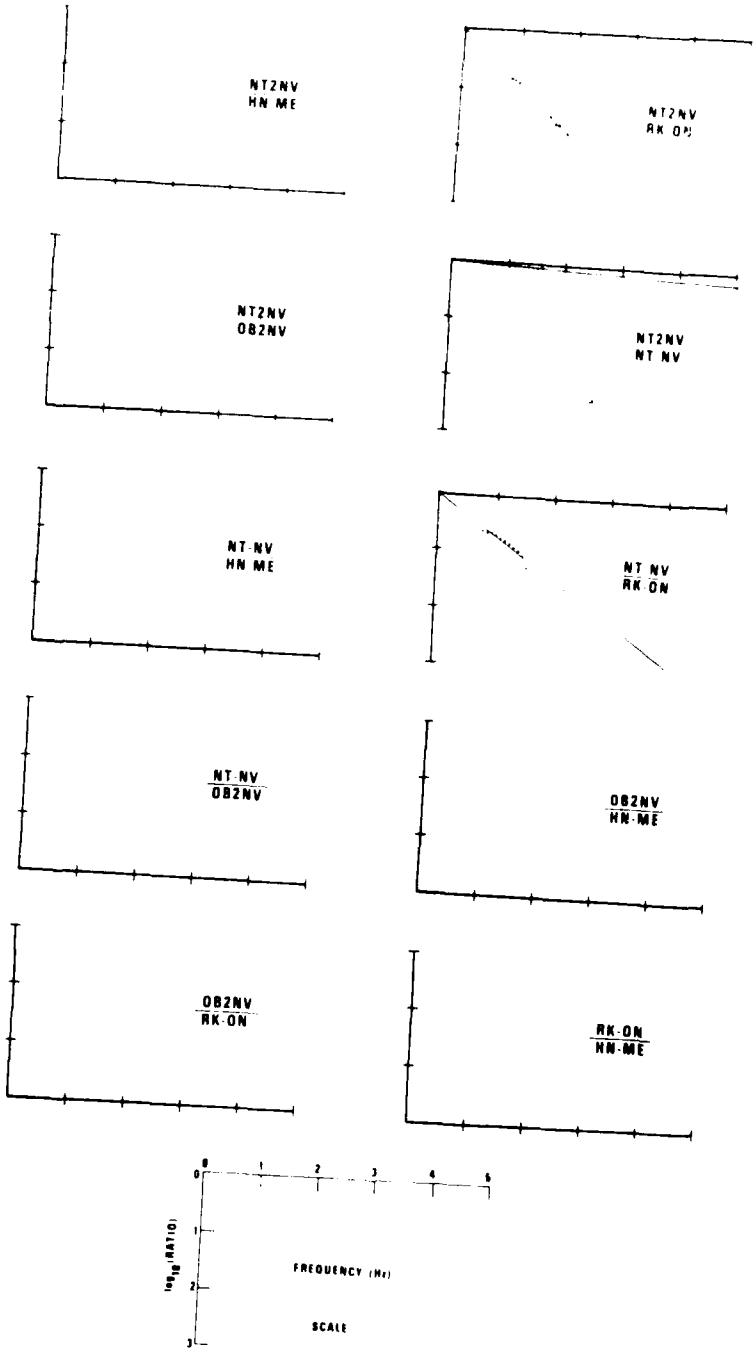


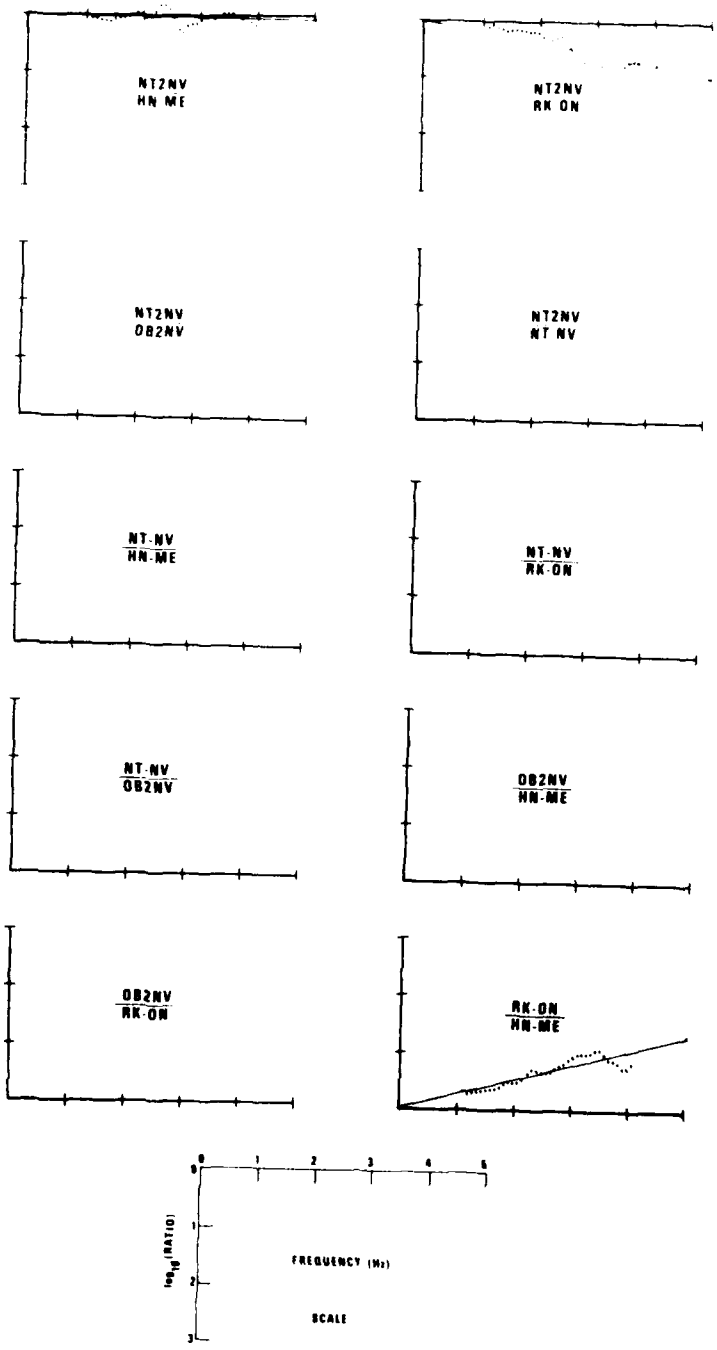
14 DEC 78
18 6 56 8
JAPAN



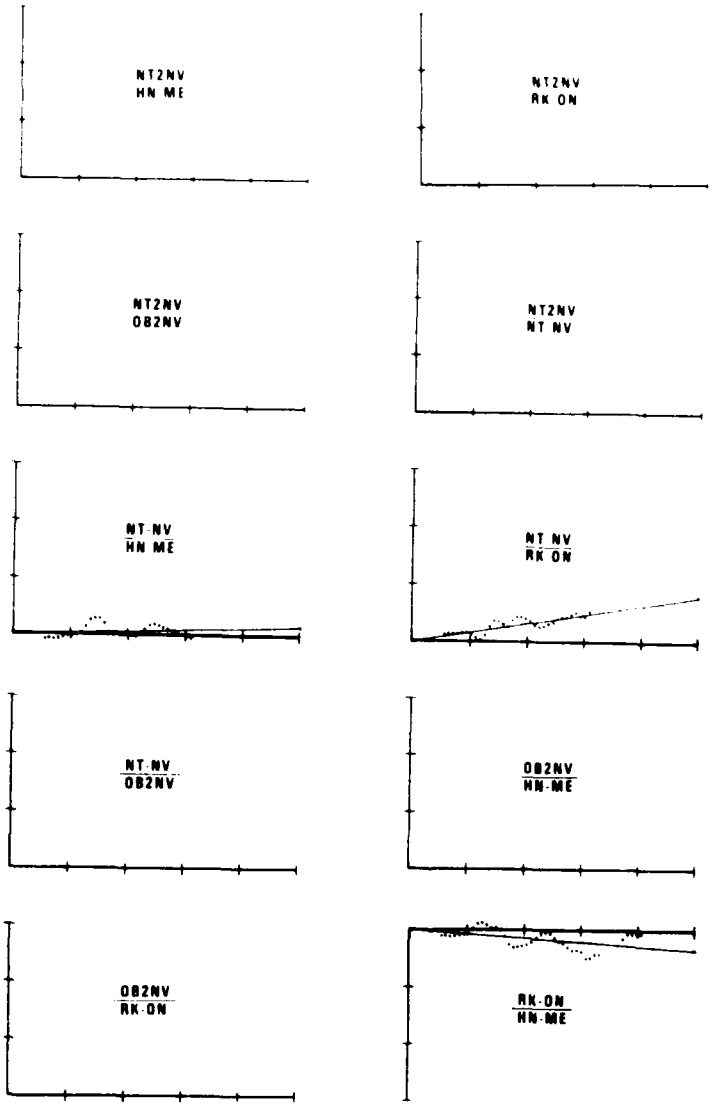
15 DEC 76
12 26 4 0
JAPAN

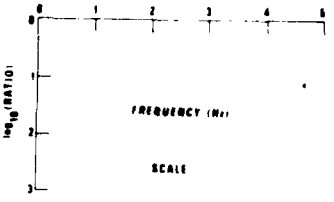


19 DEC 76
14 37 30 0
KURILES
#69



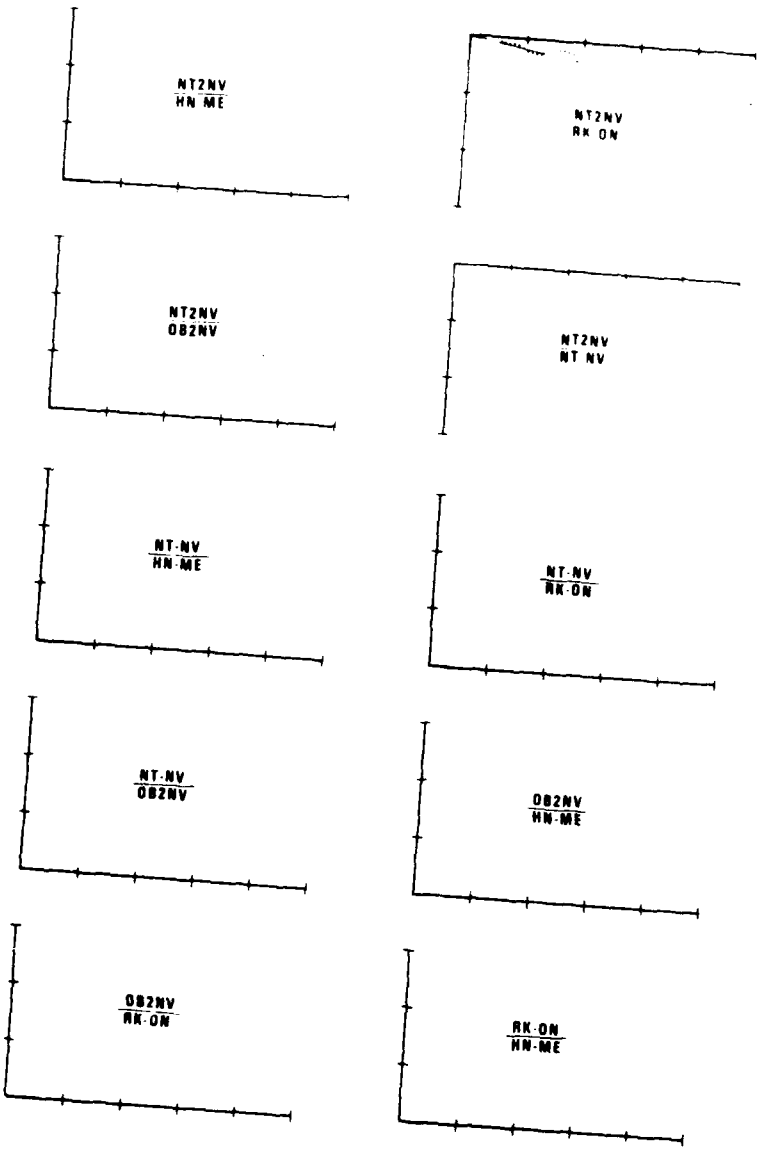
20 DEC 76
10 18 58 0
COLUMBIA



20 DEC 76
21 22 25 0
BR COLUMBIA

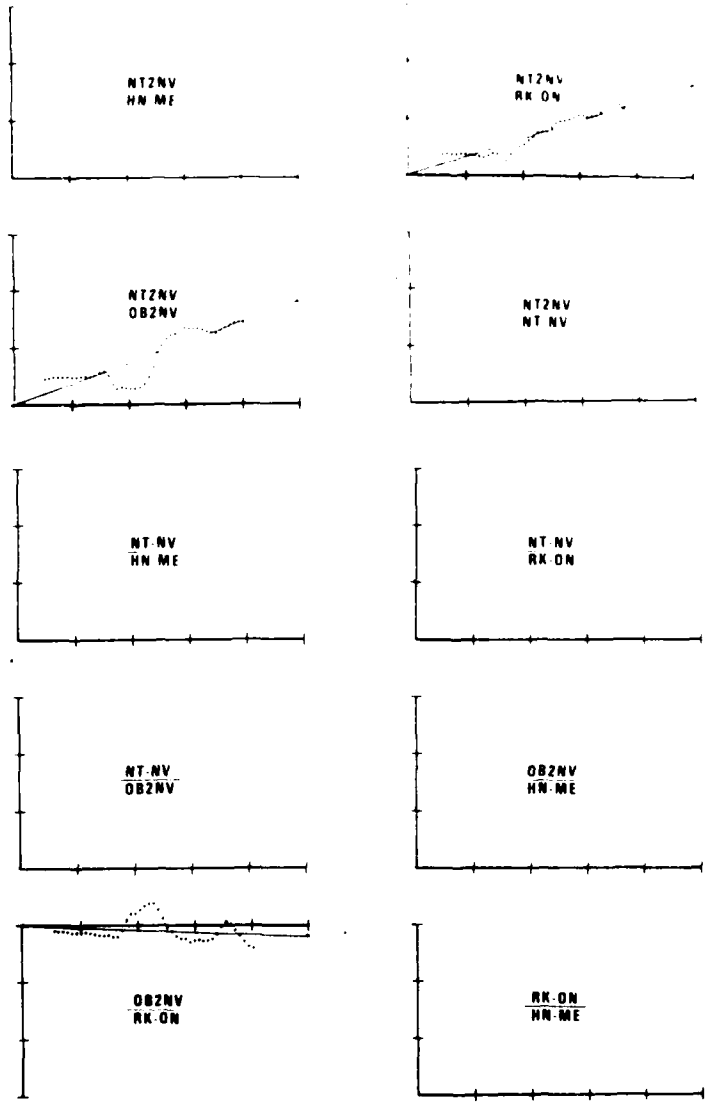
#73

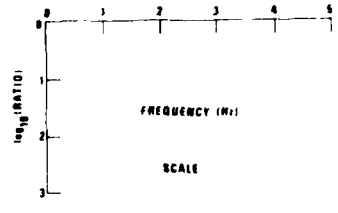


22 DEC 76

1142 0

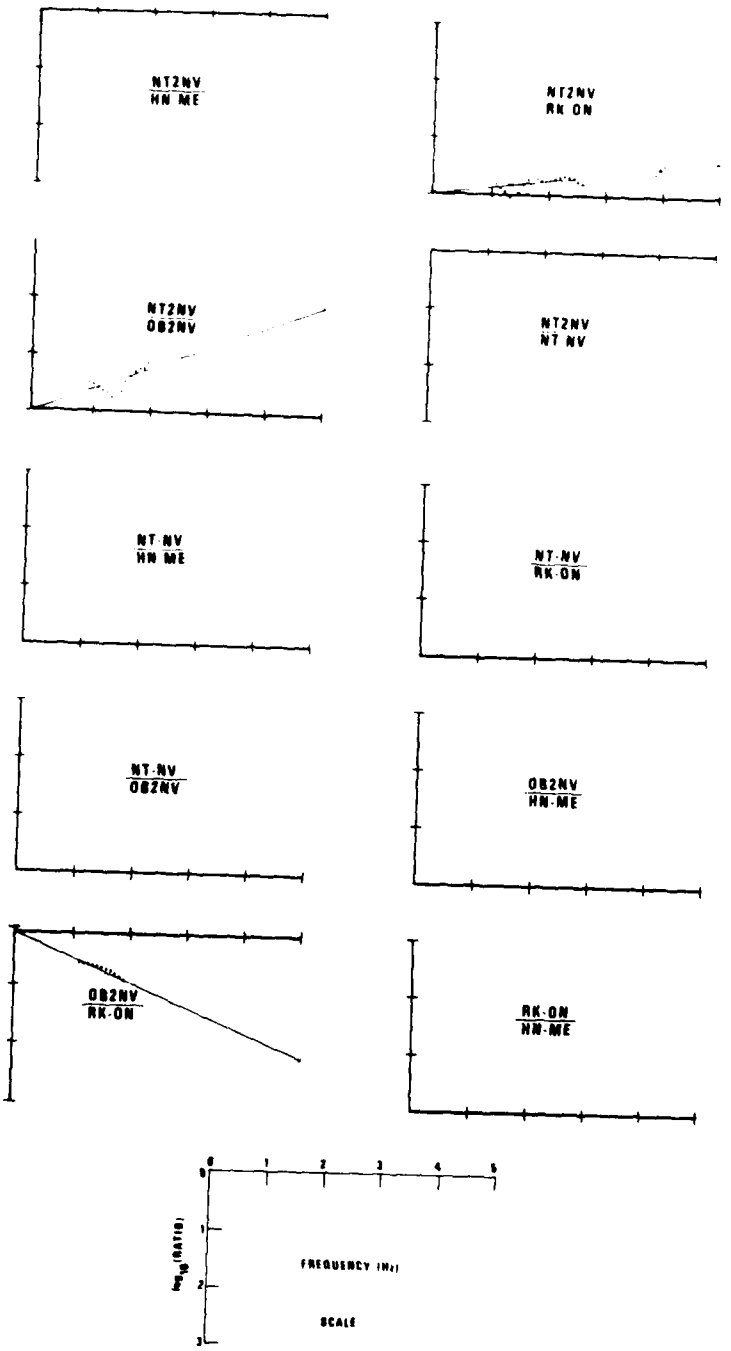
VOLCANO ISLANDS



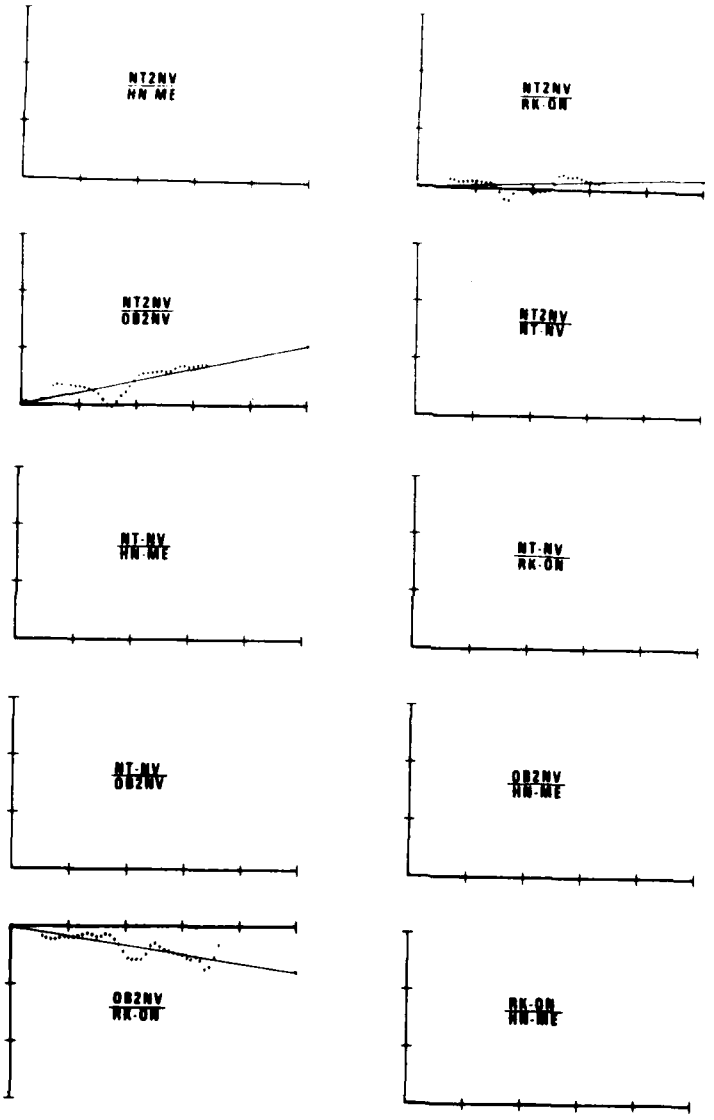



27 DEC 76
18 8 8 0
JAPAN

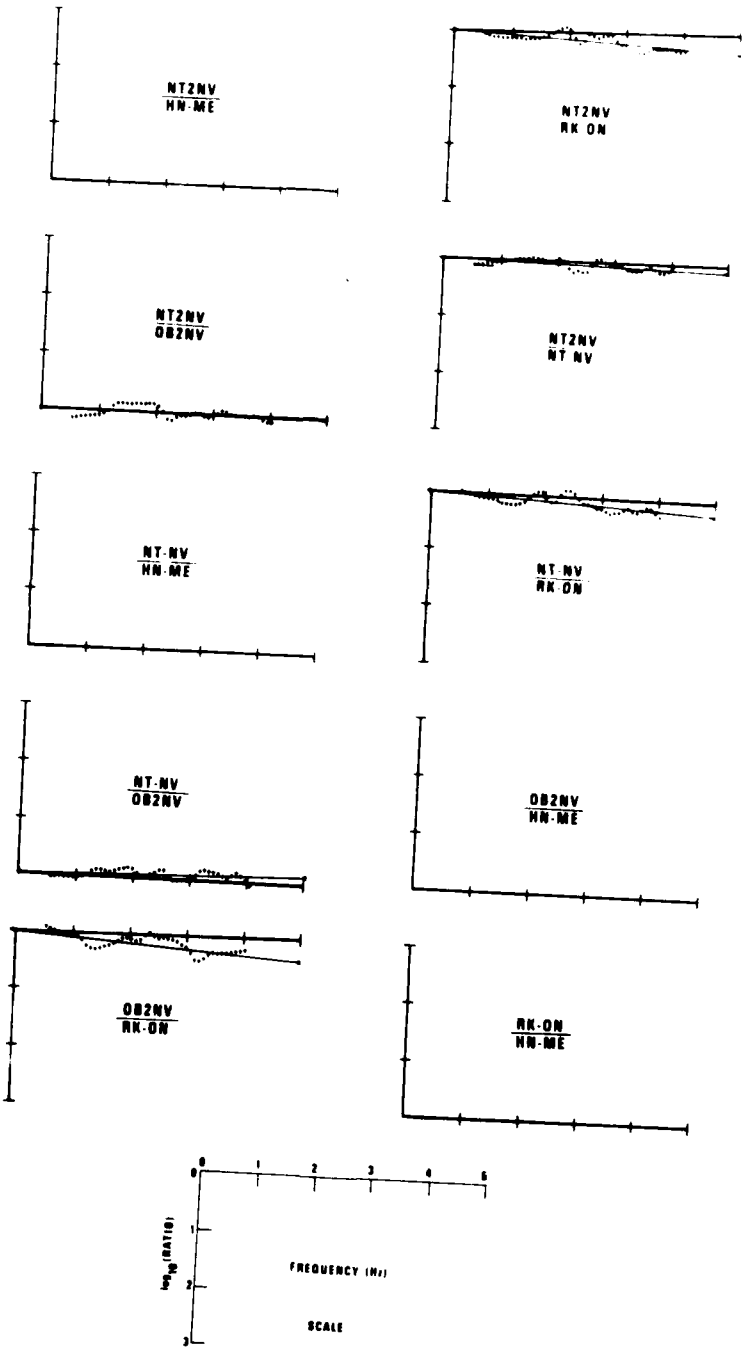
#77



31 DEC 78
9 18 37 0
JAPAN
#79

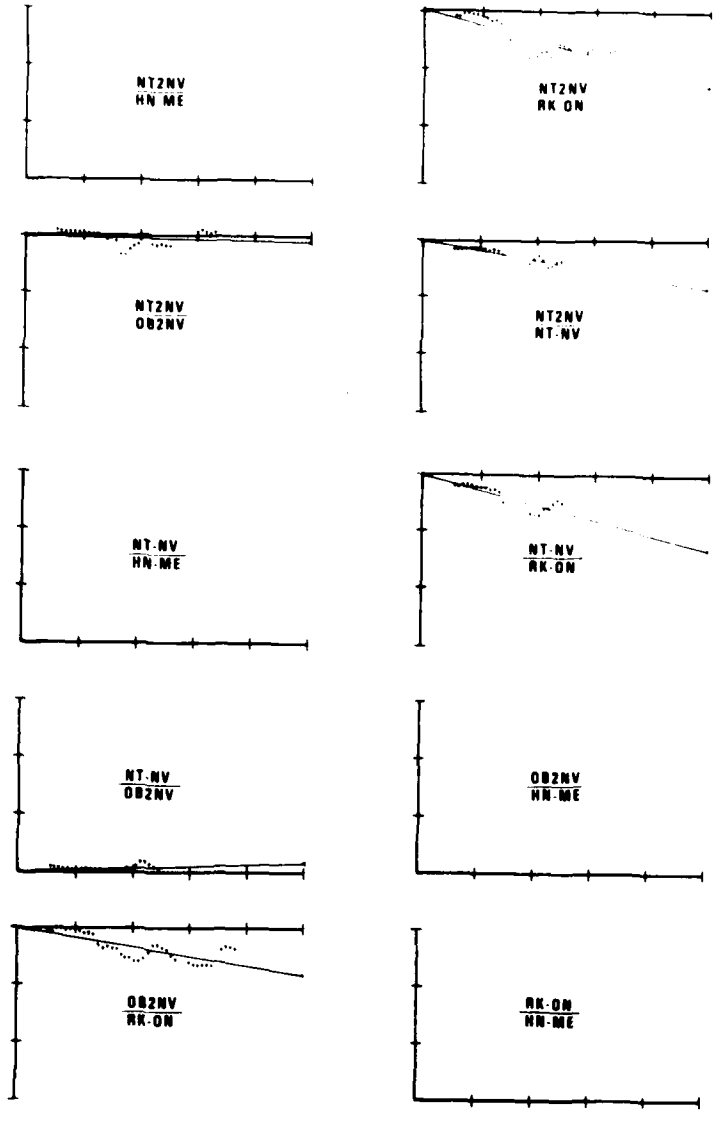


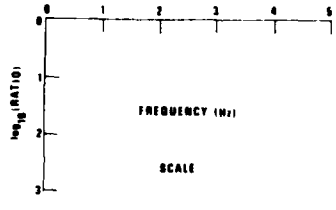
1 JAN 77
11 33 42 4
JAPAN
#80



5 JAN 77
10 37 33 6
VOLCANO ISLAND

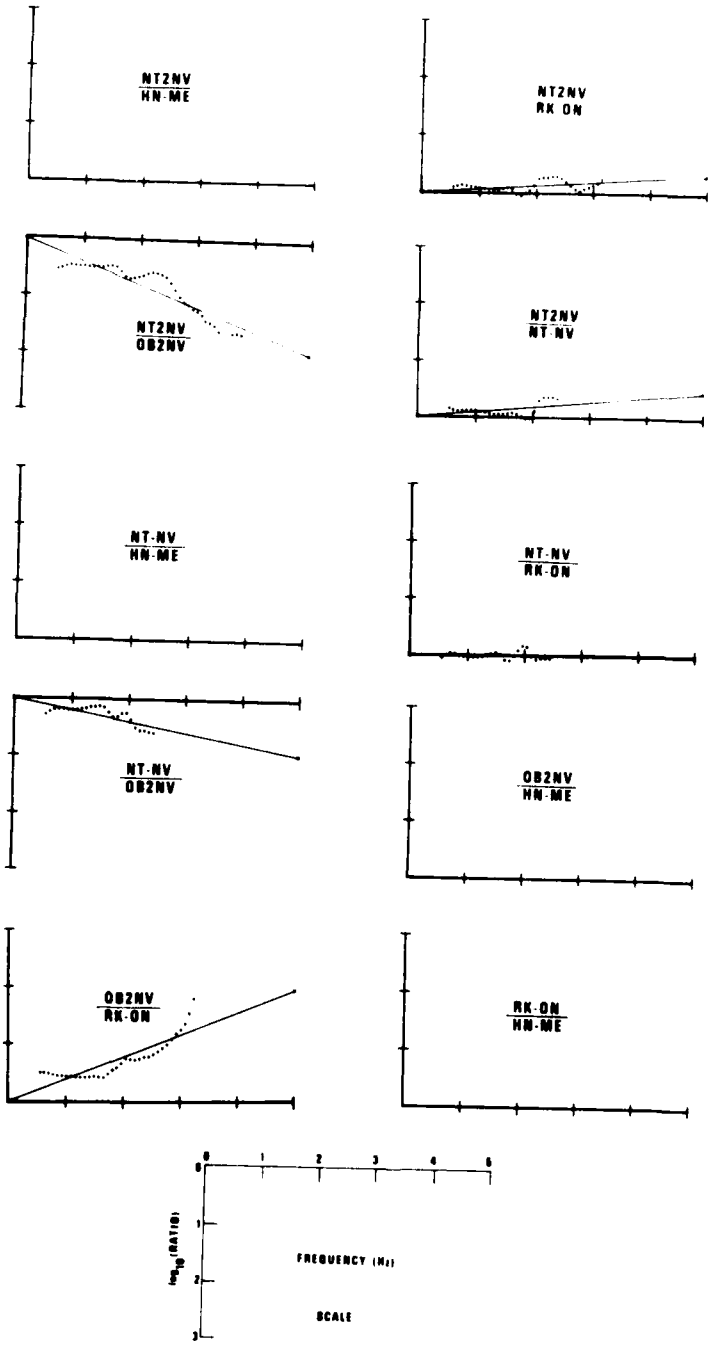
#82



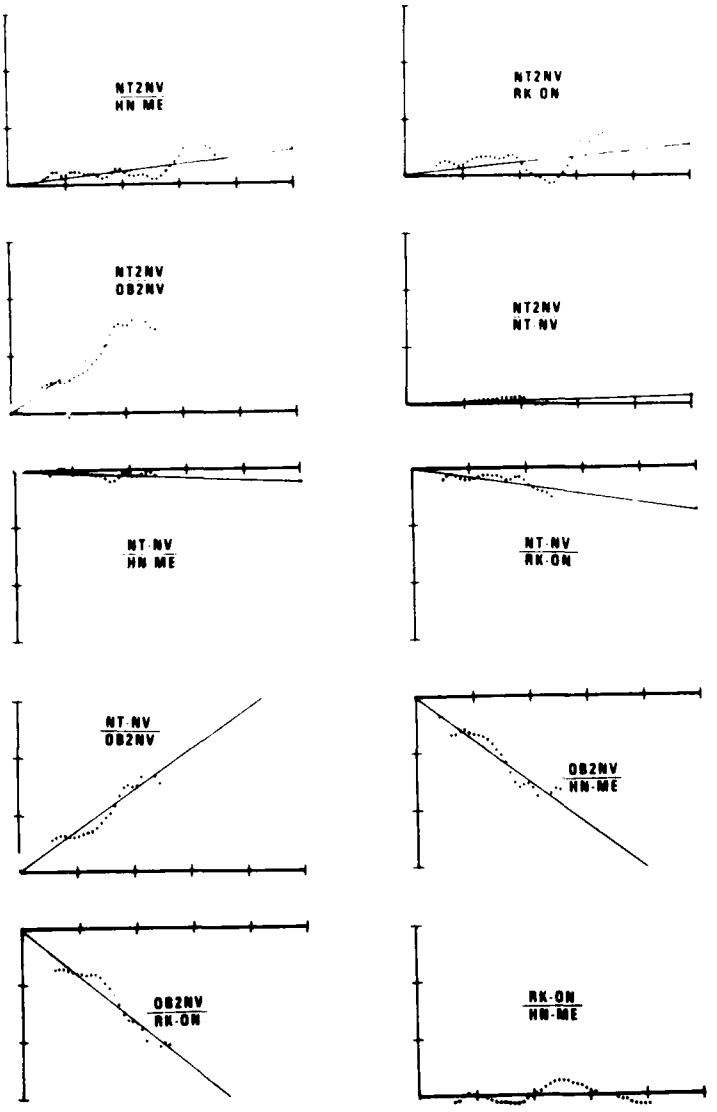
5 JAN 77
22 44 57.0
VOLCANO IS

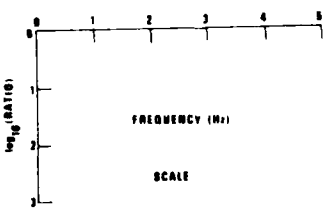
#83



6 JAN 77
7 55 55 5
KURILES

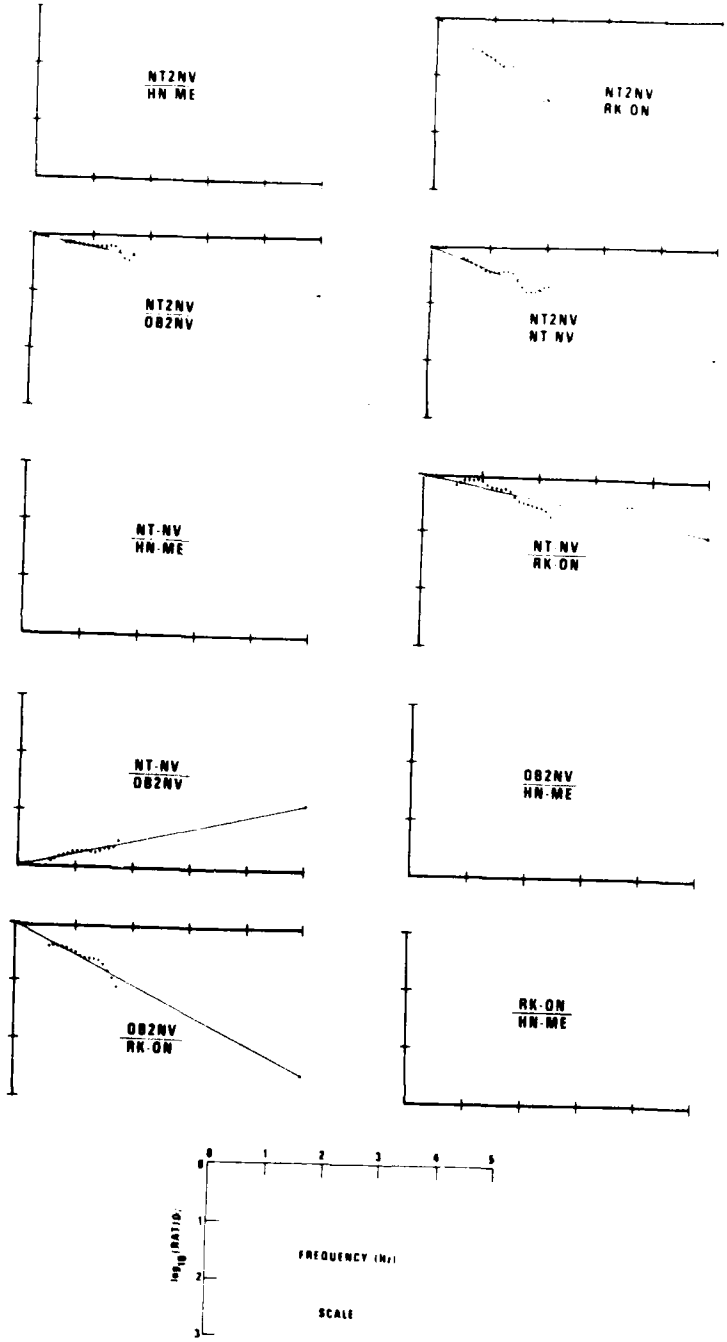
#84



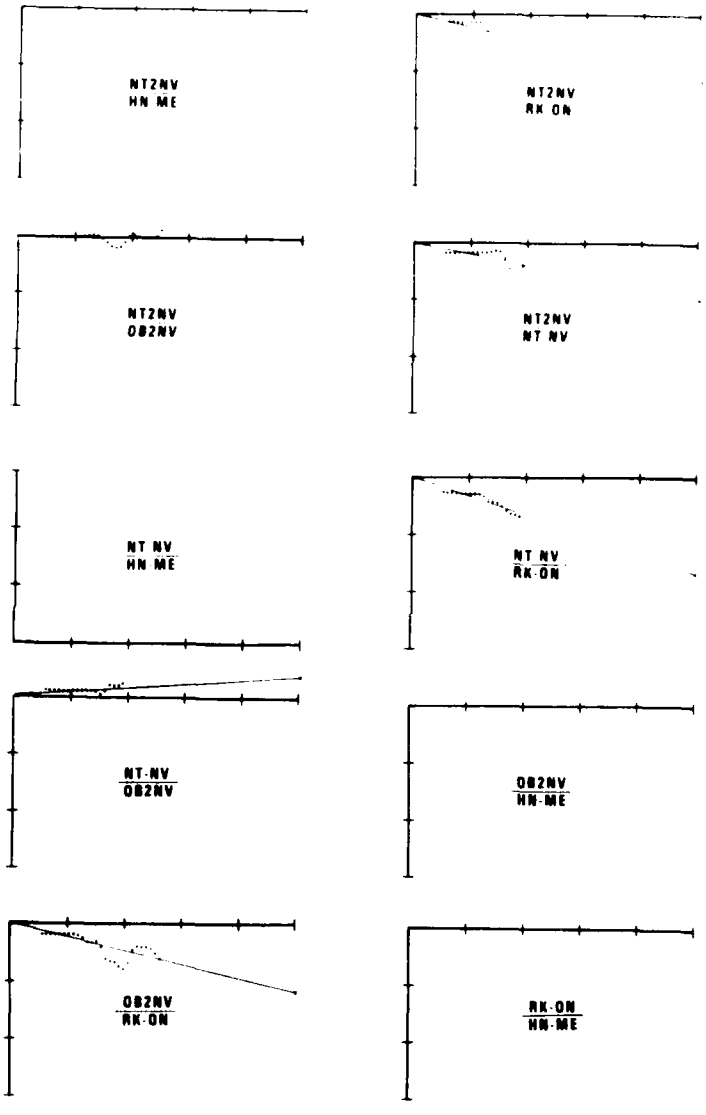



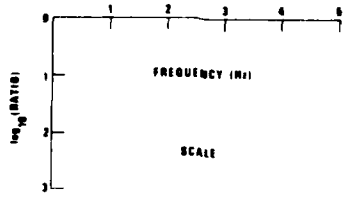
6 JAN 77
16 2 3 6
ANDREANOF IS

#85



17 JAN 77
6 23 42 6
BONIN IS
#87



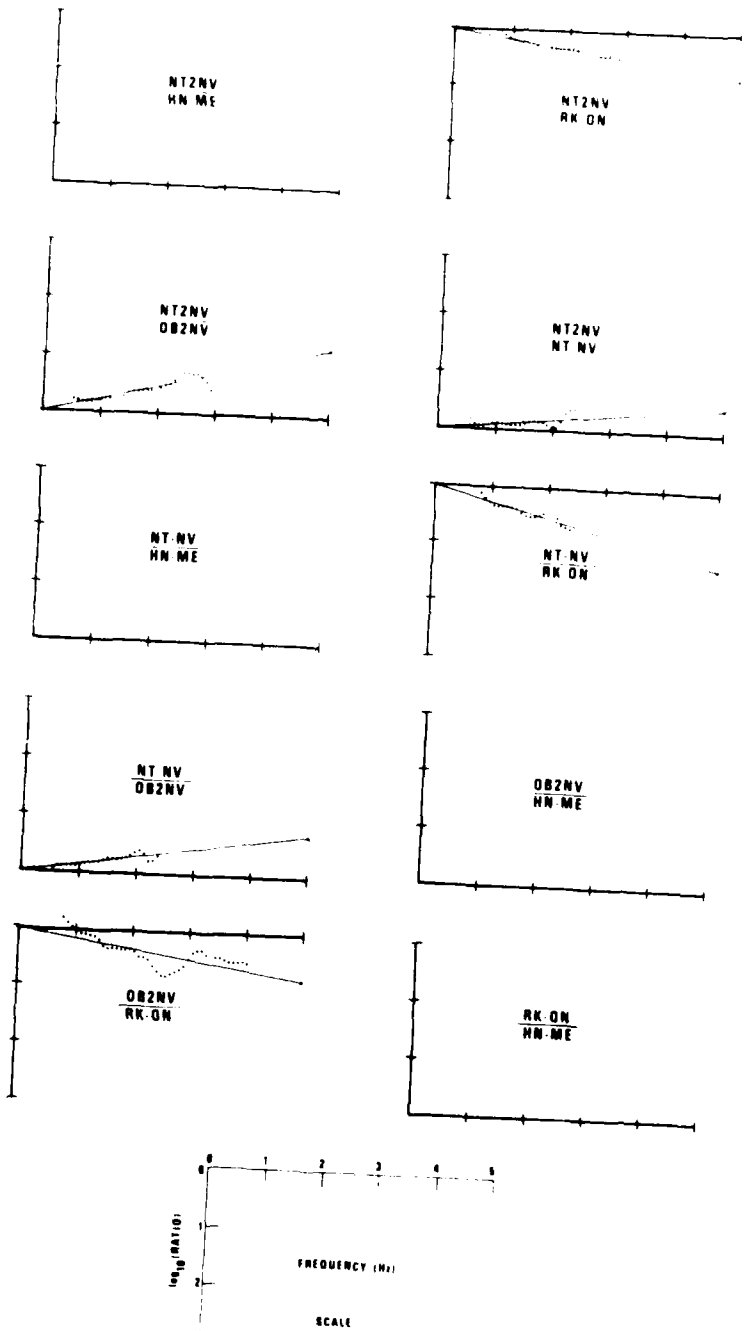



17 JAN 77

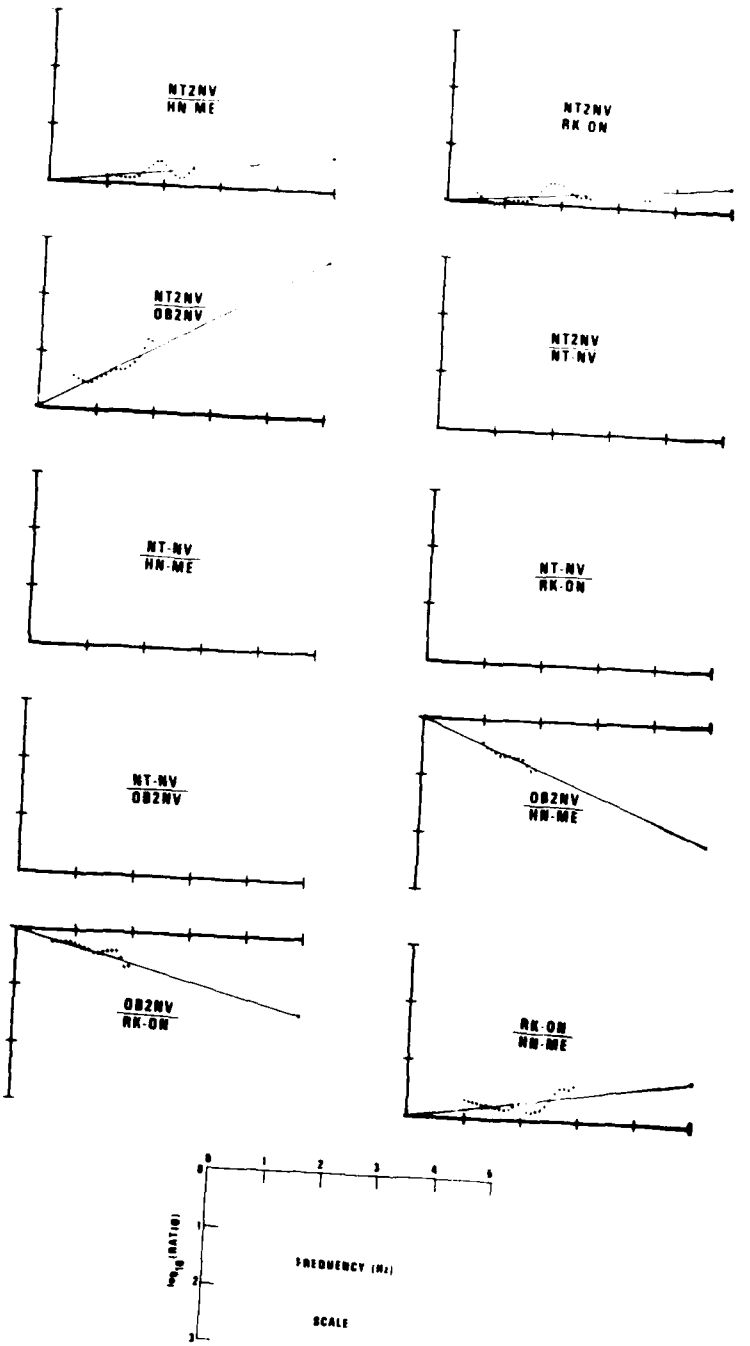
9 42 22 5

ALASKA PENINSULA

F30



24 JAN 77
0 11 30 0
KURILES
#55

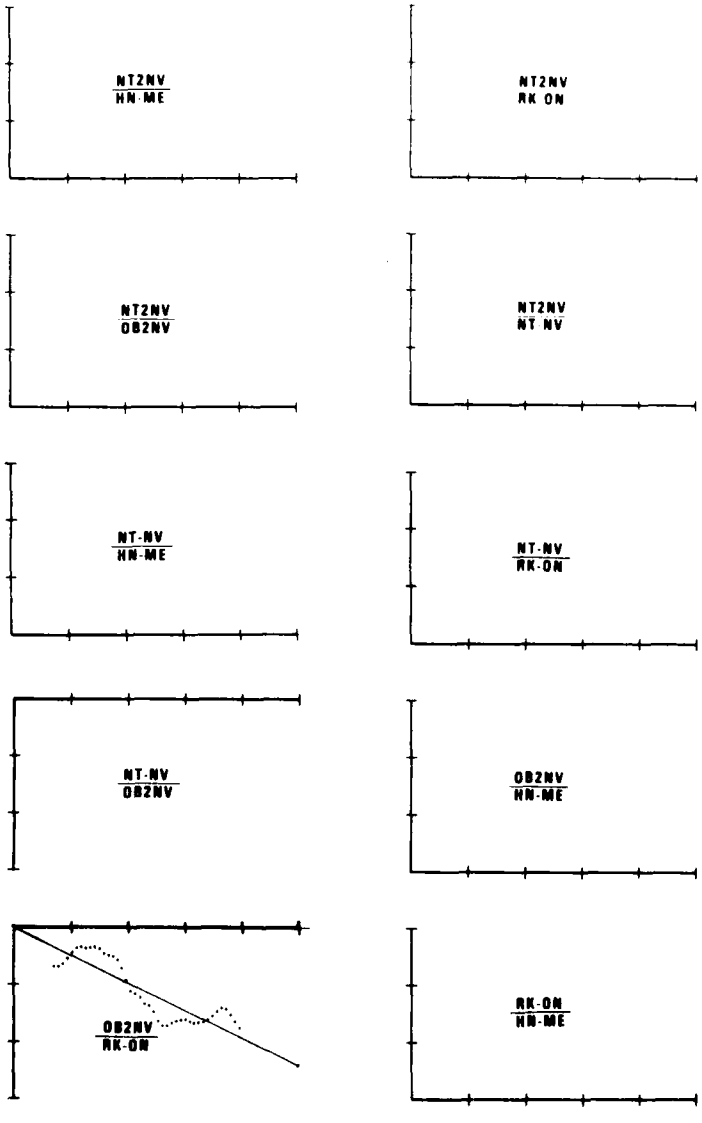


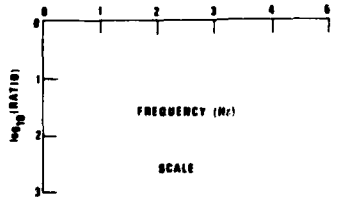
28 JAN 77

4 24 28 8

BONIN ISLANDS

(This Event Inadvertently Omitted From The Data Shown In Appendix A)



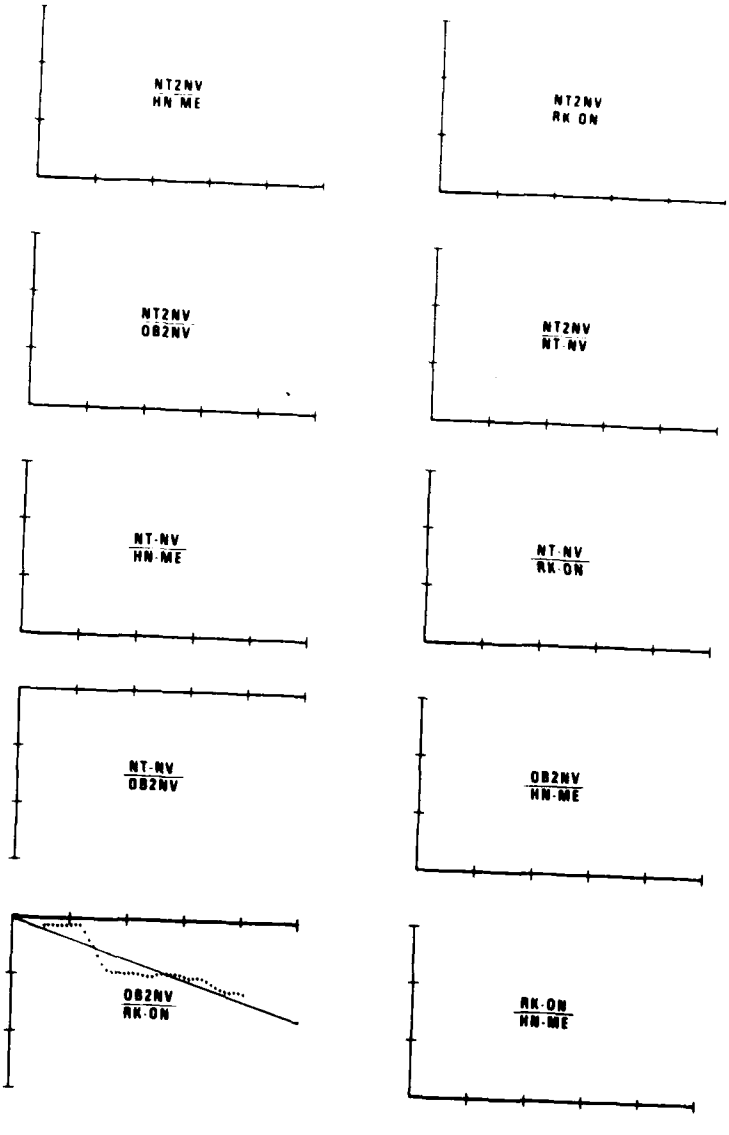



3 FEB 77

21 30 59 0

RUSSIA-CHINA BDR

#90

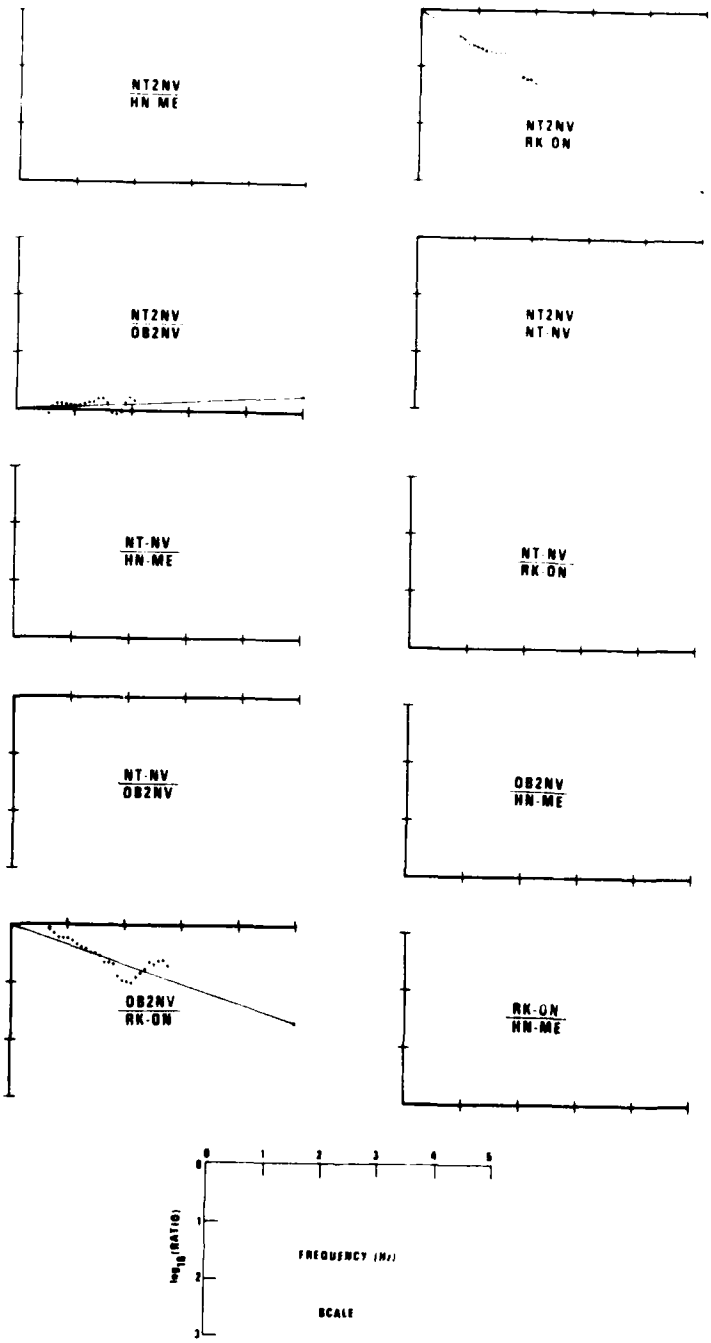


6 FEB 77

0 31 28 0

N ATLANTIC

#91

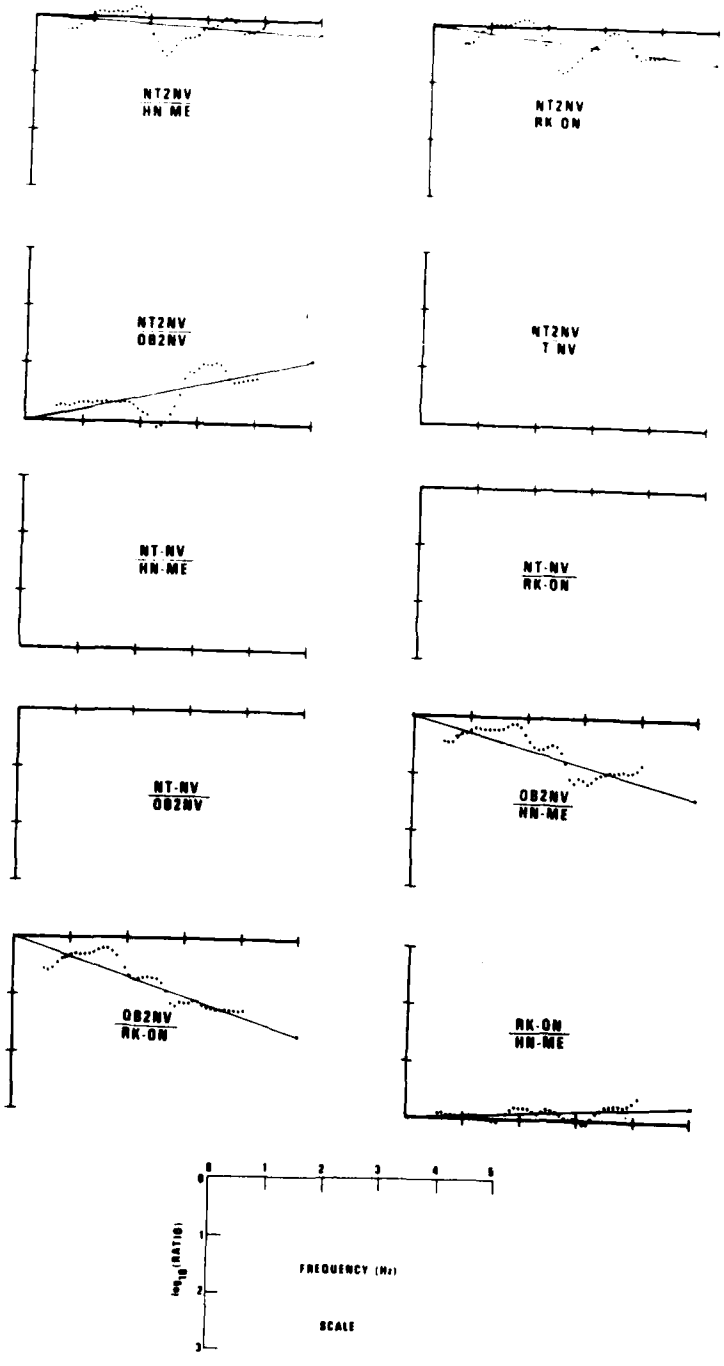


13 FEB 77

5 51 11 0

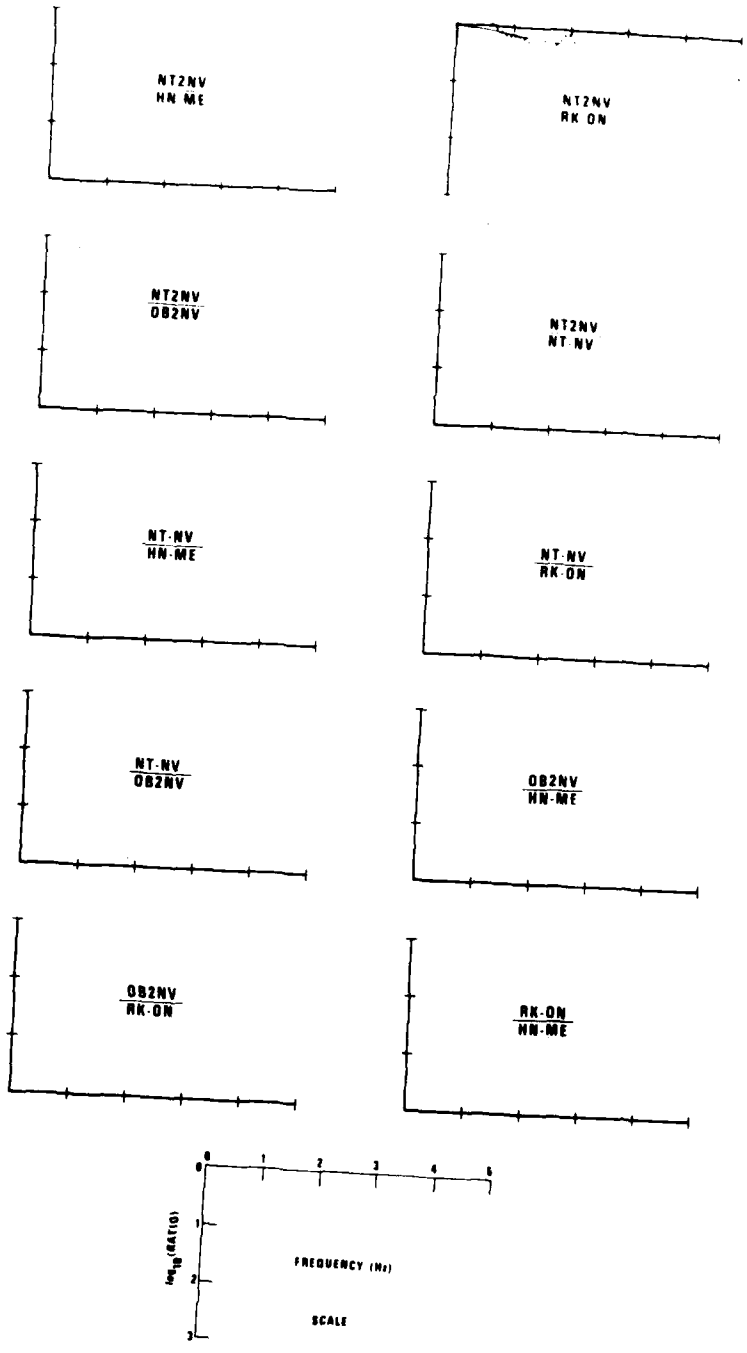
KAMCHATKA

#92



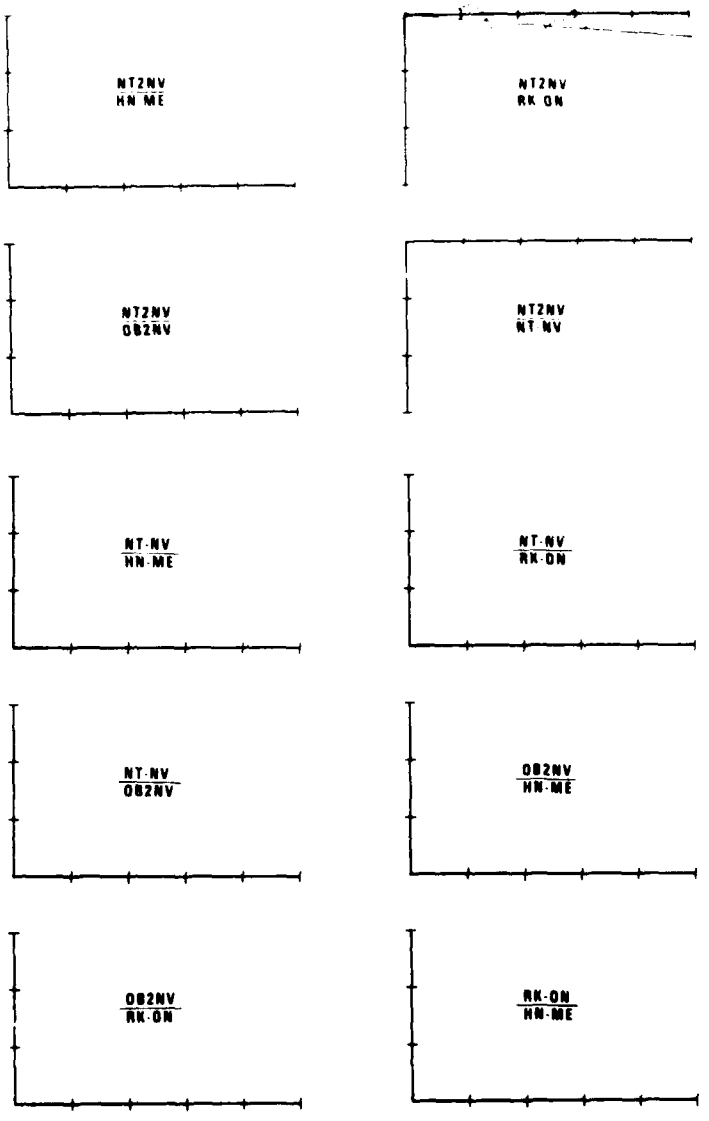
16 FEB 77
0 50 18 0
N ATLANTIC

#33



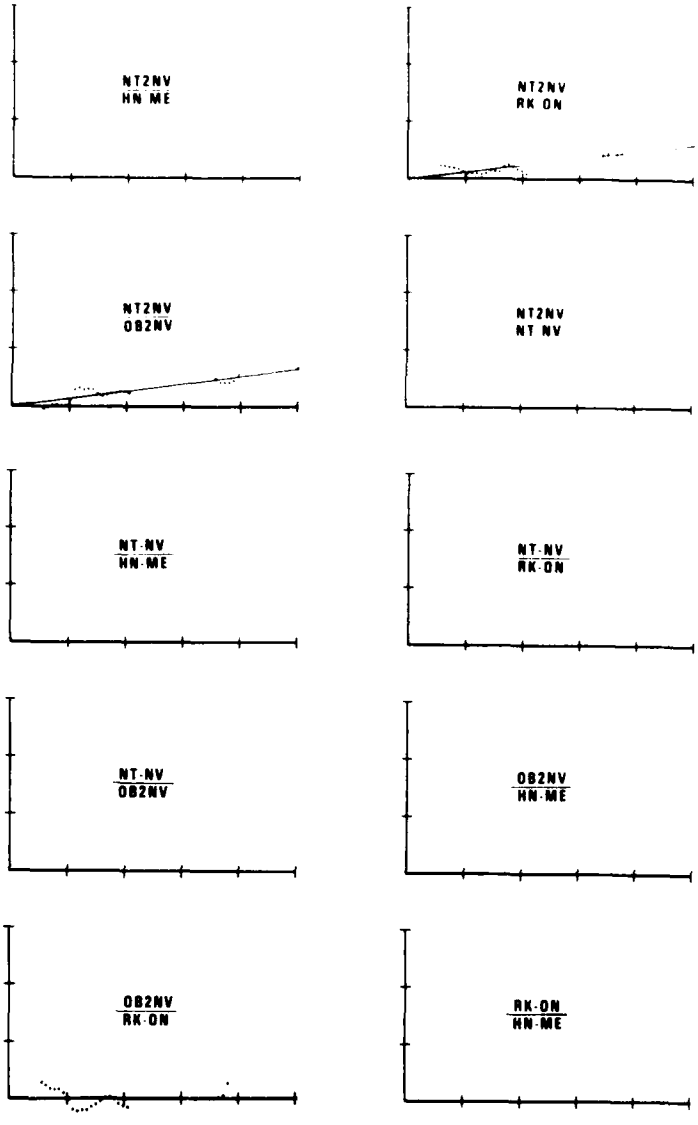
16 FEB 77
15 48 0
N PACIFIC

#94



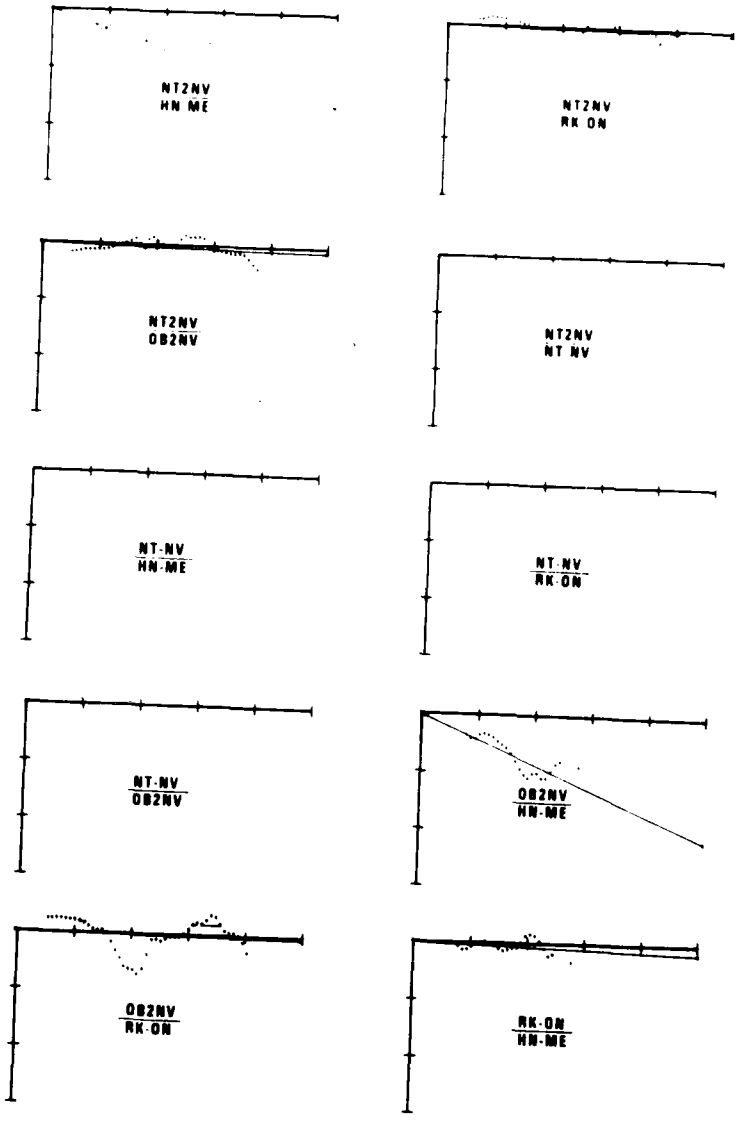
17 FEB 77
13 32 7 0
KOMANDORSKI

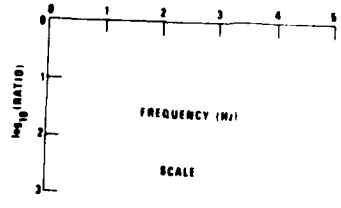
#95



18 FEB 77
20 51 26 0
JAPAN

#30



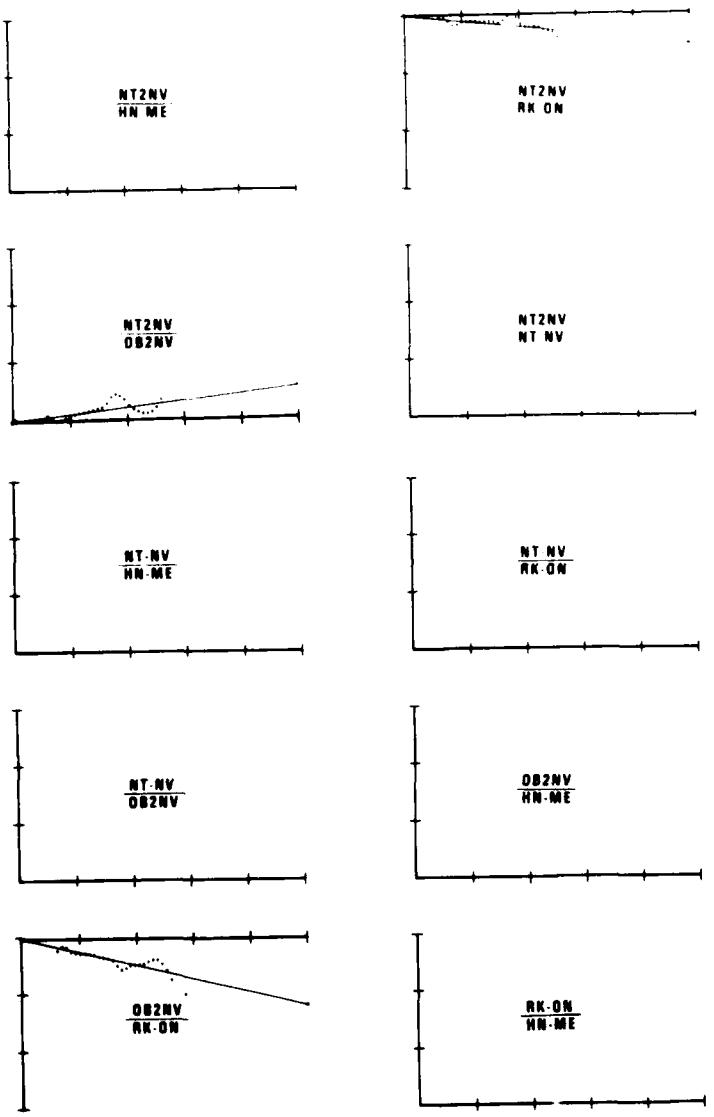



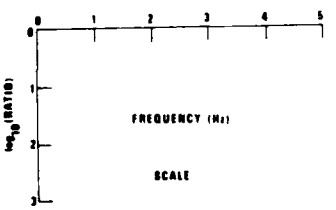
19 FEB 77

5 5110

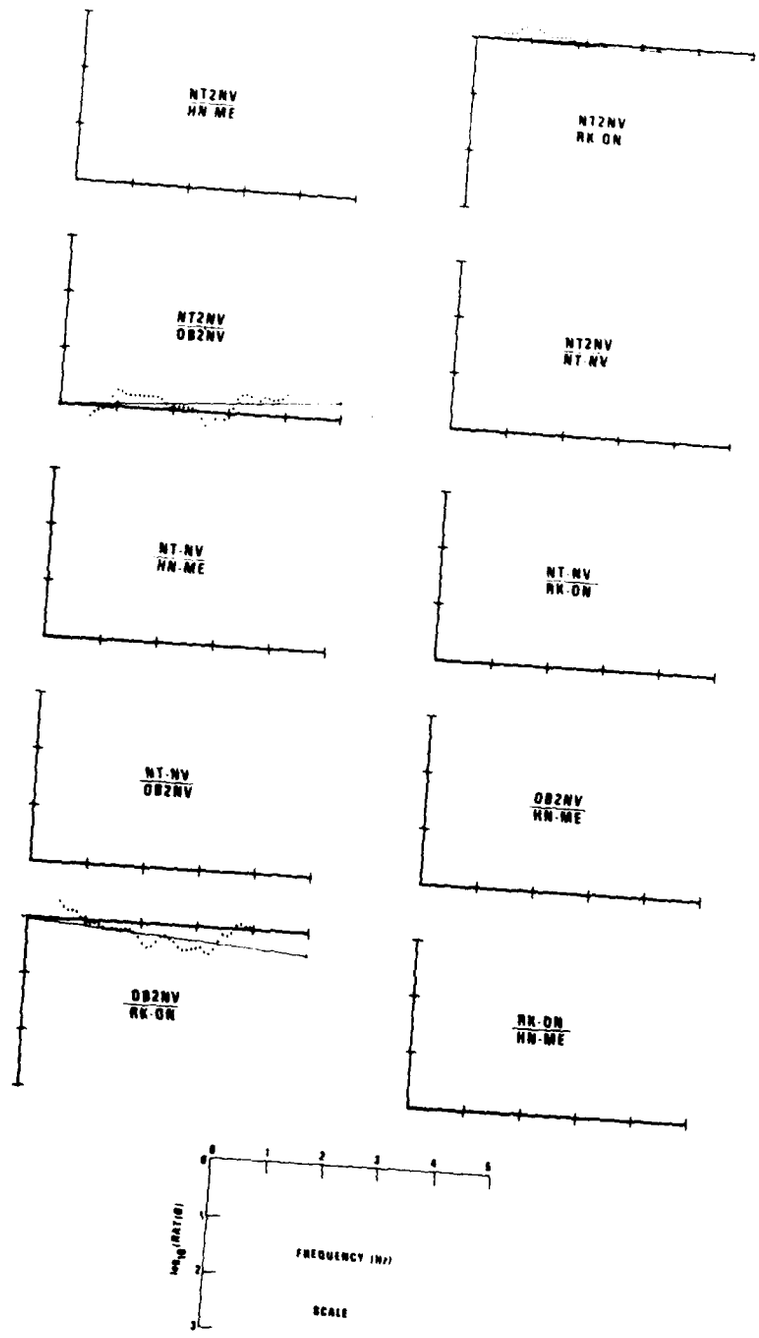
KAMCHATKA

#98



18 FEB 77
22 47 7 0
ALEUTIANS
#100

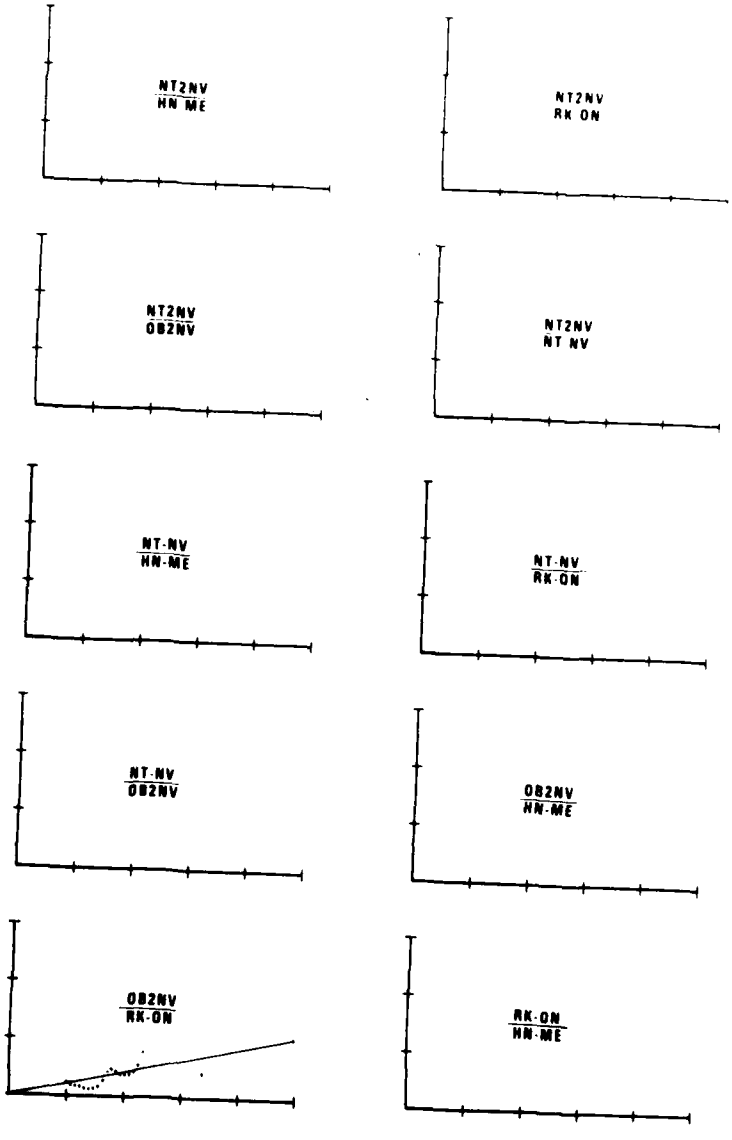


20 FEB 77

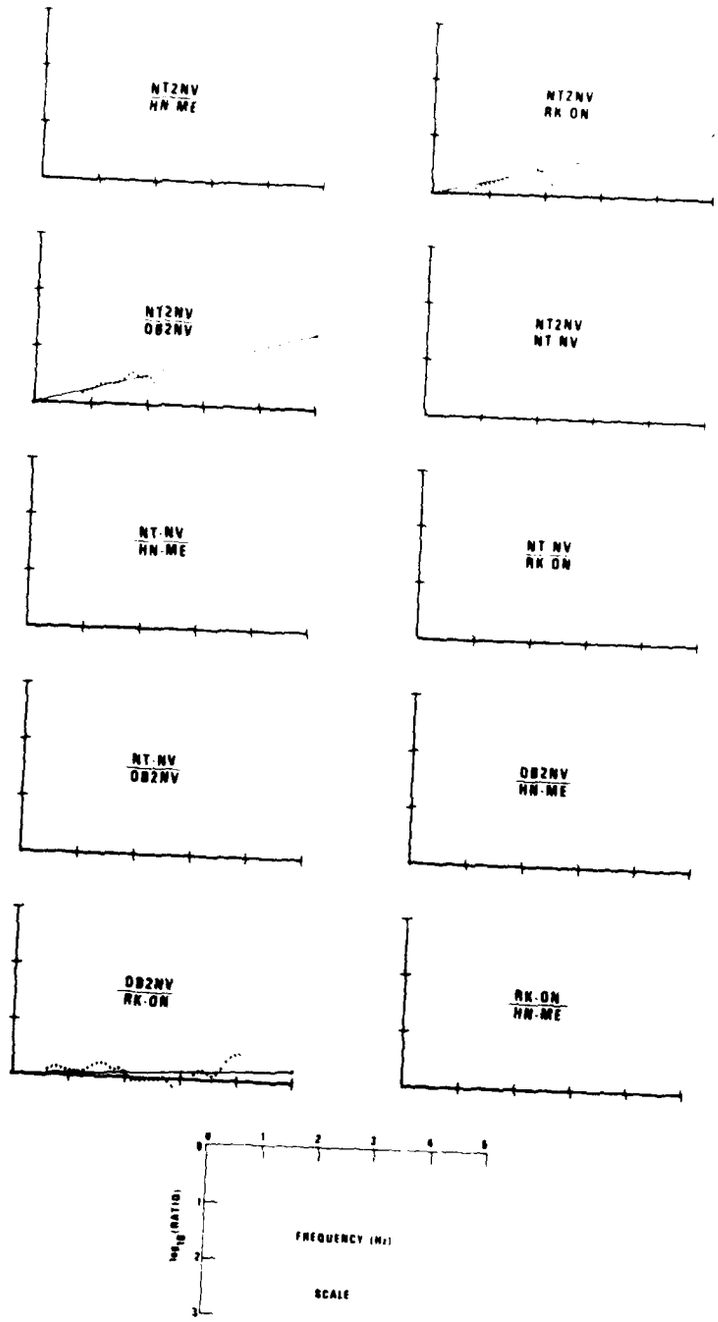
7200

KODIAK ISLAND

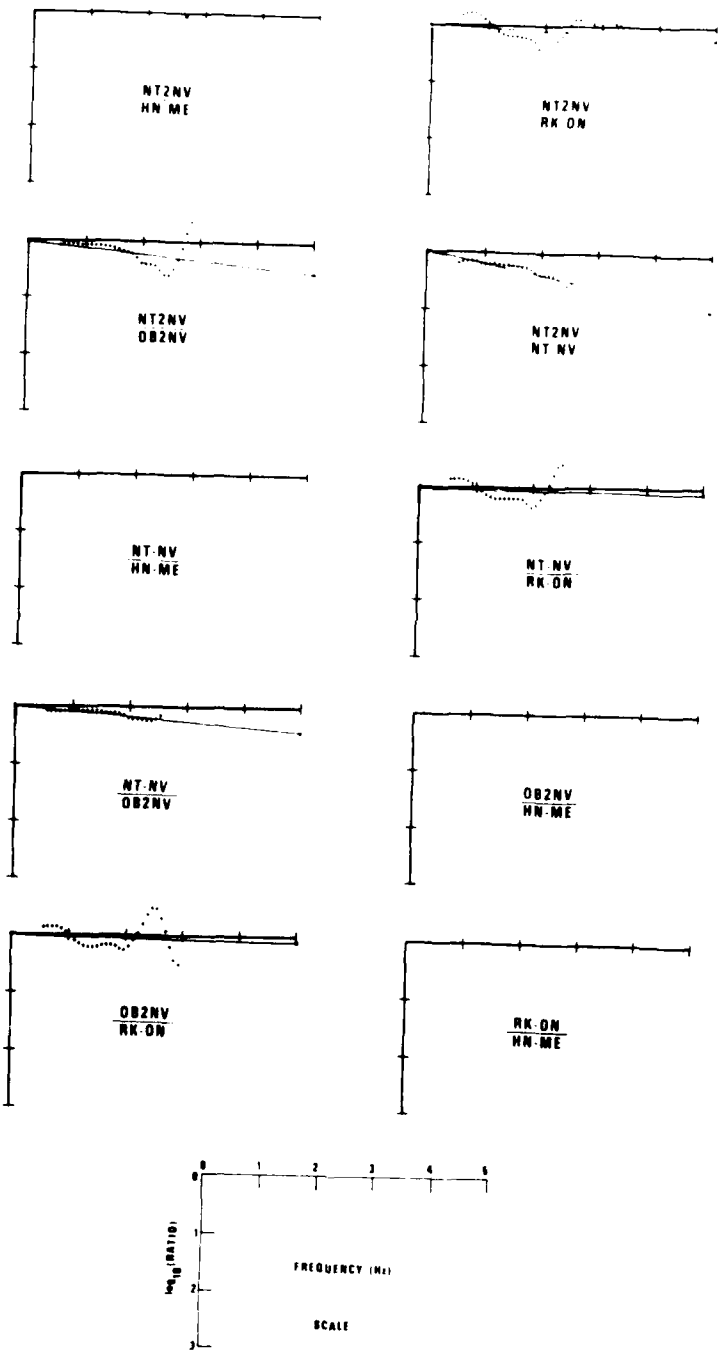
#101



20 FEB 77
8 0 38 0
ALEUTIANS
#102



4 MAR 77
19 21 40 0
*RUMANIA*

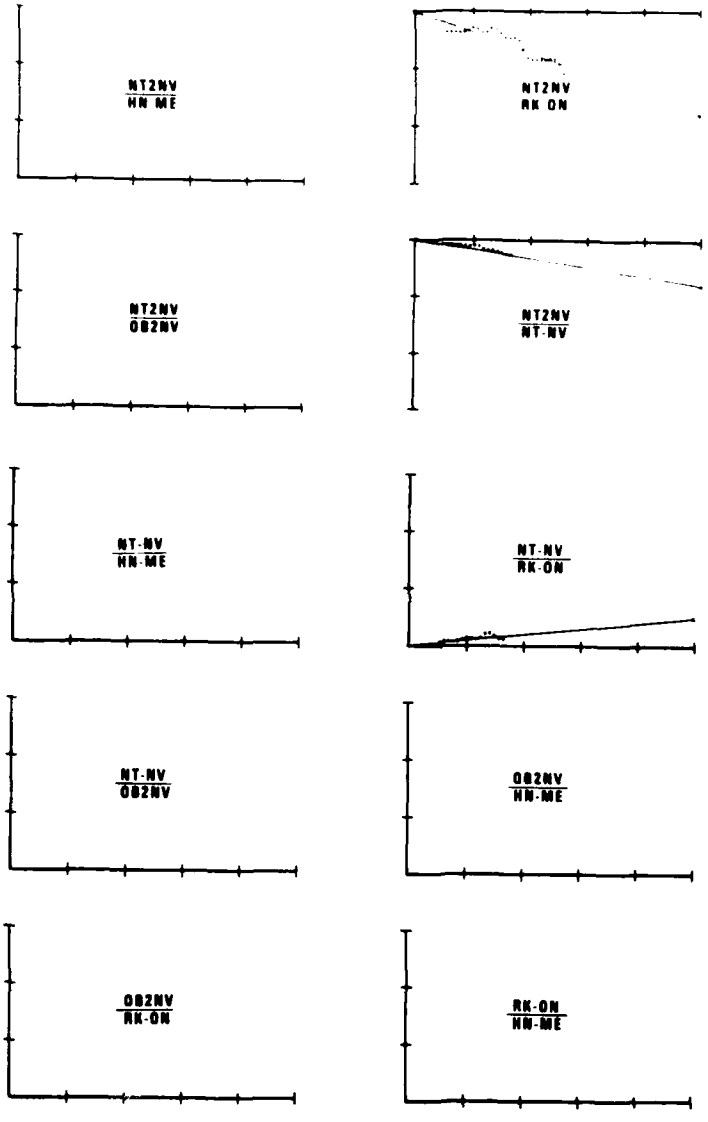


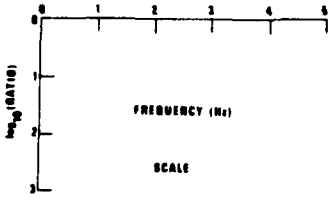
7 MAR 77

0 29 11 0

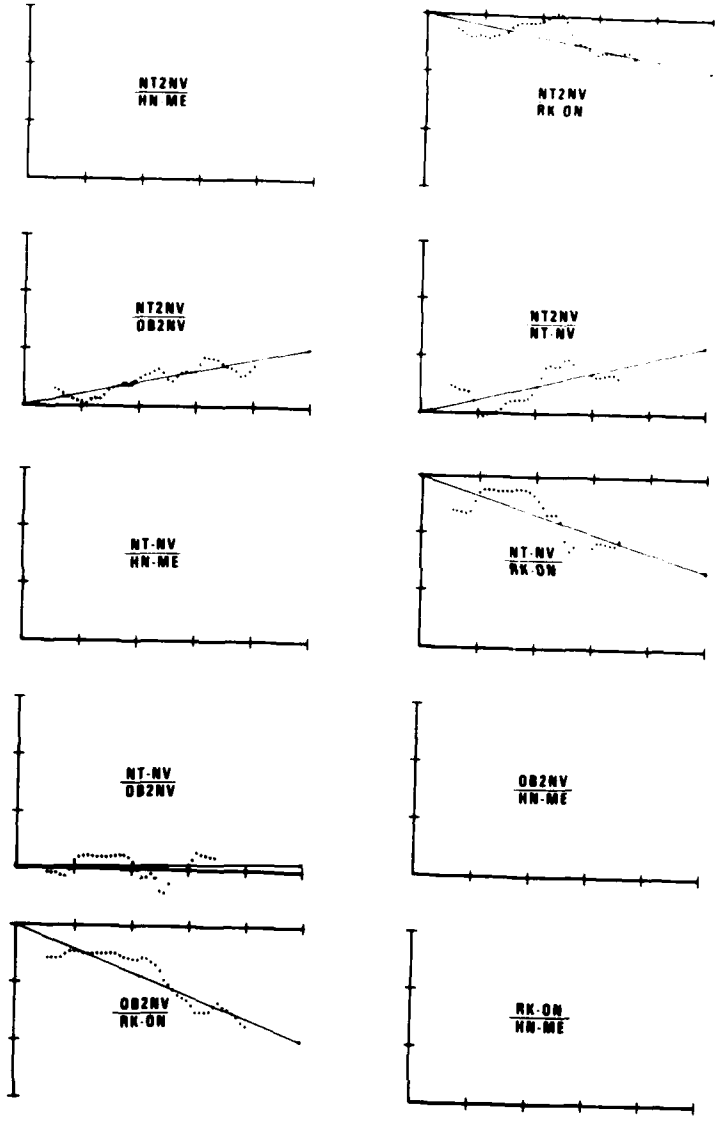
CHINA

#112



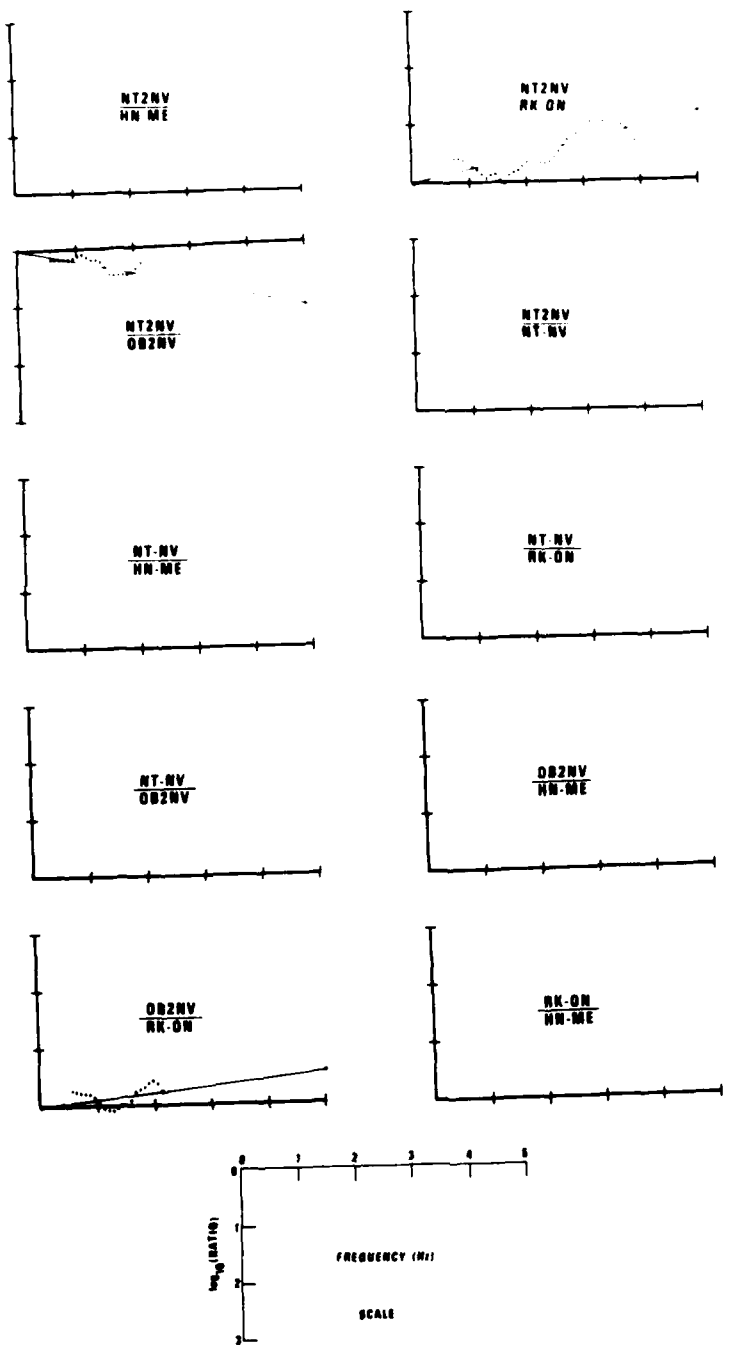



7 MAR 77
9 11 55 0
N PACIFIC
#113



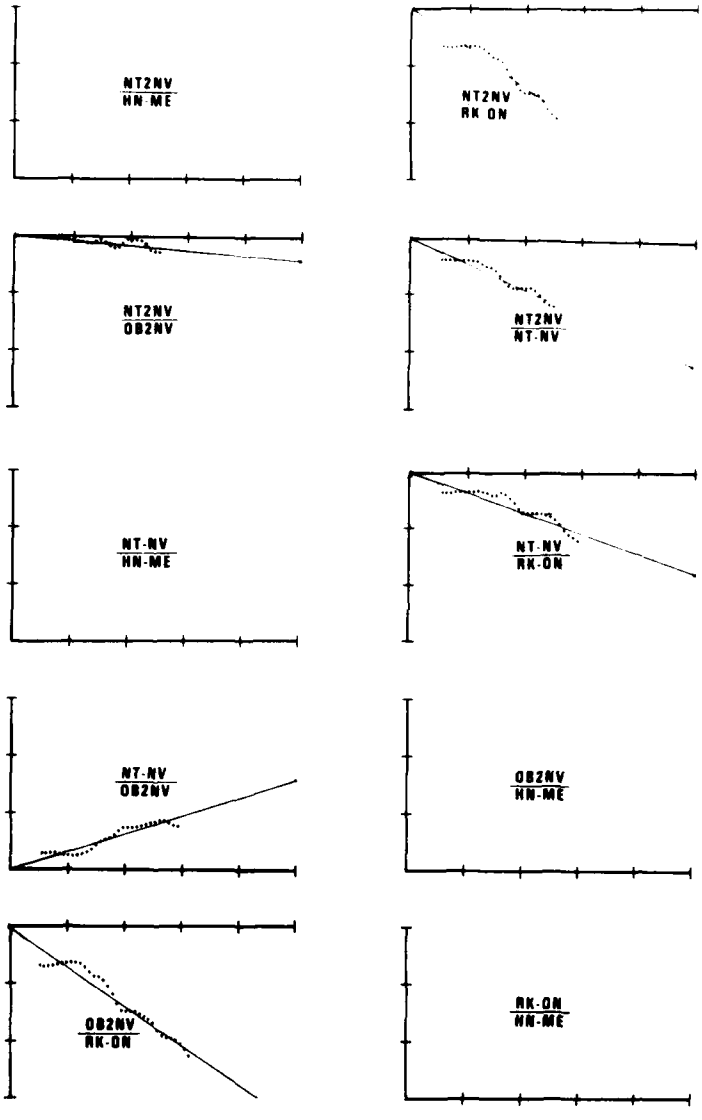
6 MAR 77
22 46 44 0
BRAZIL

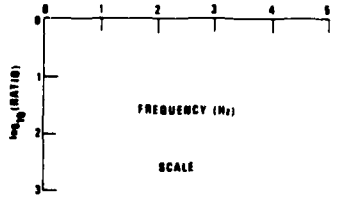
#103



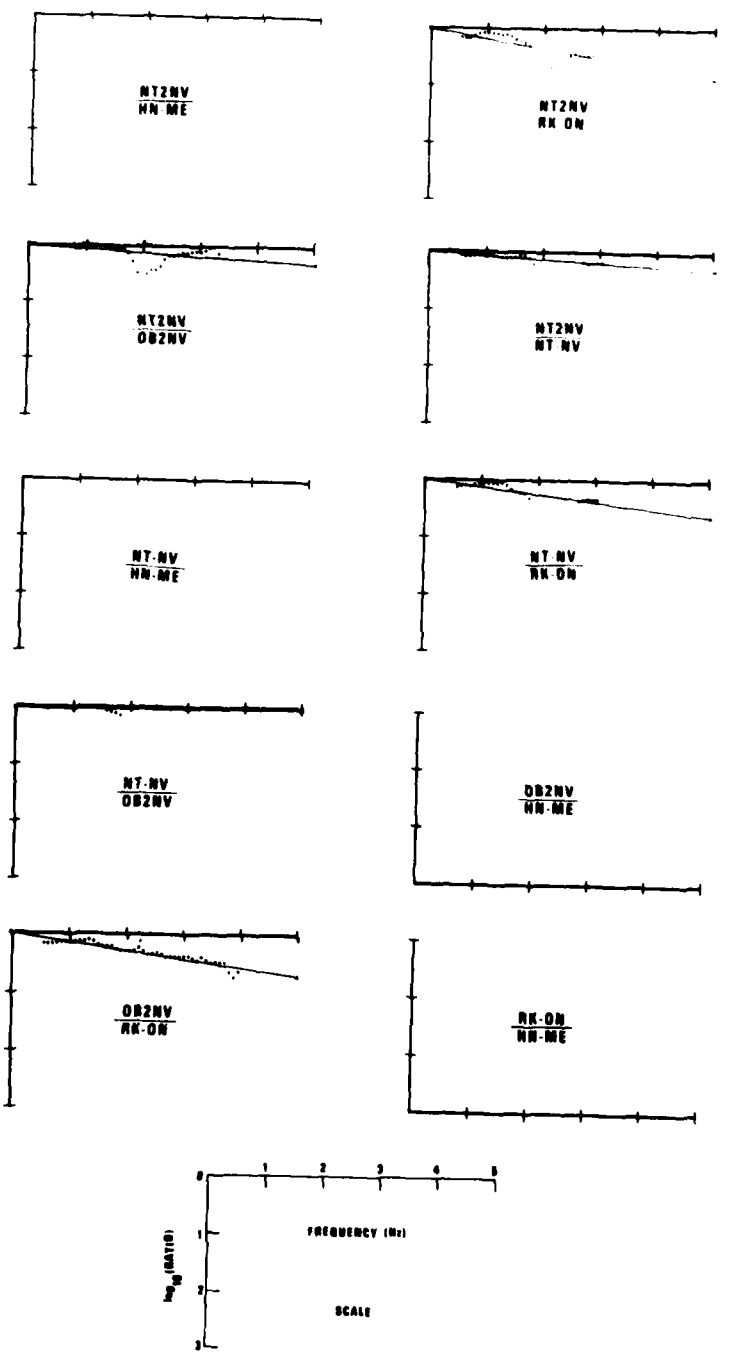
12 MAR 77
2 58 55 0
N ATLANTIC

#105

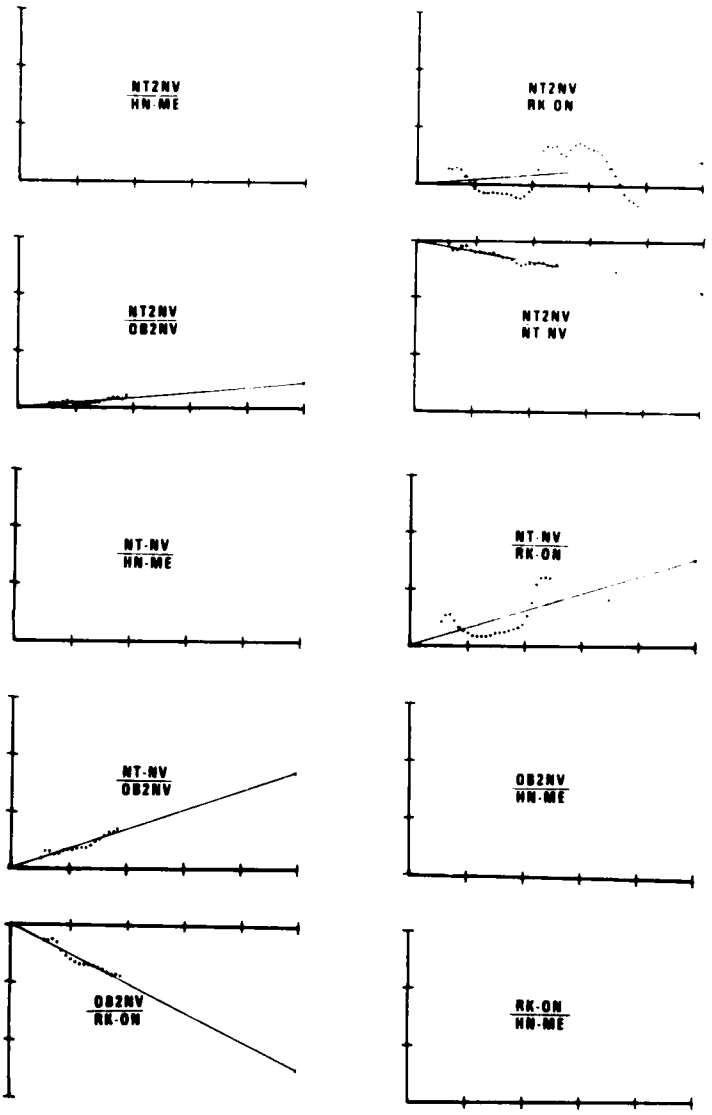


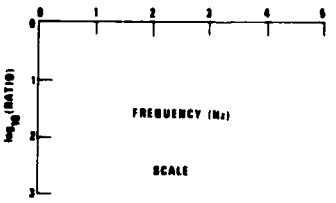



13 MAR 77
4 55 55 0
BRAZIL
#106

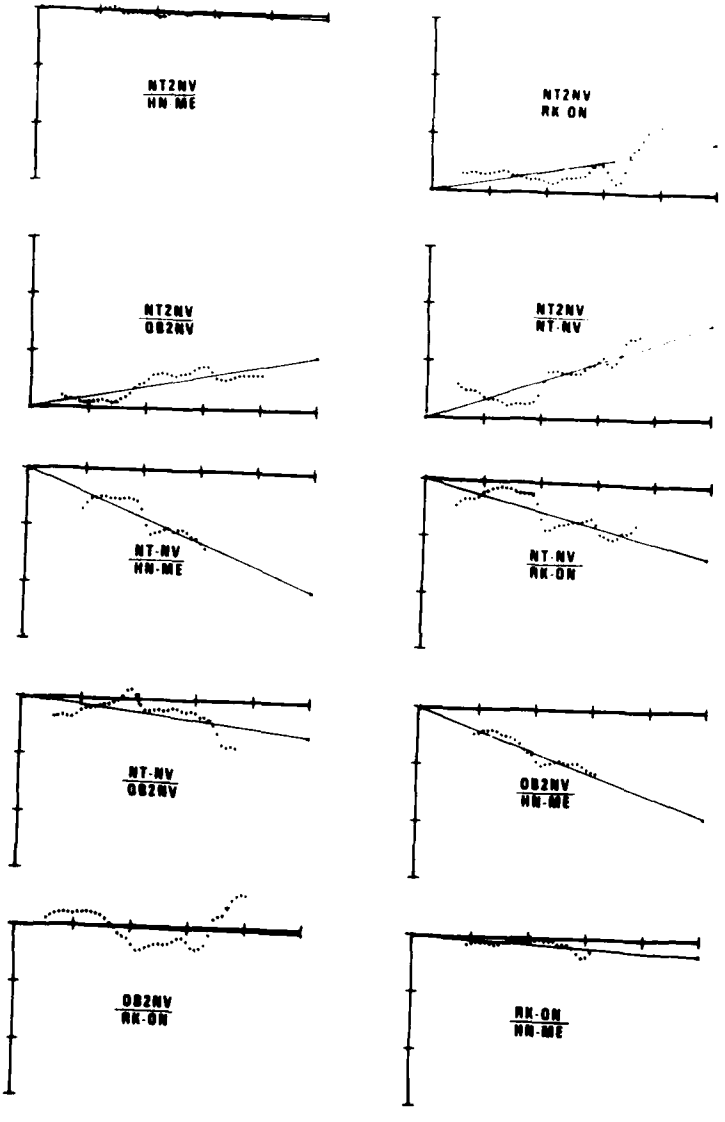


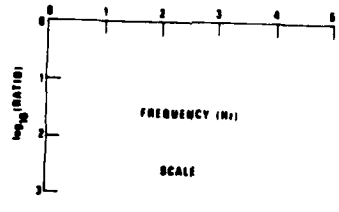
15 MAR 77
21.28.9 8
COSTA RICA
#108



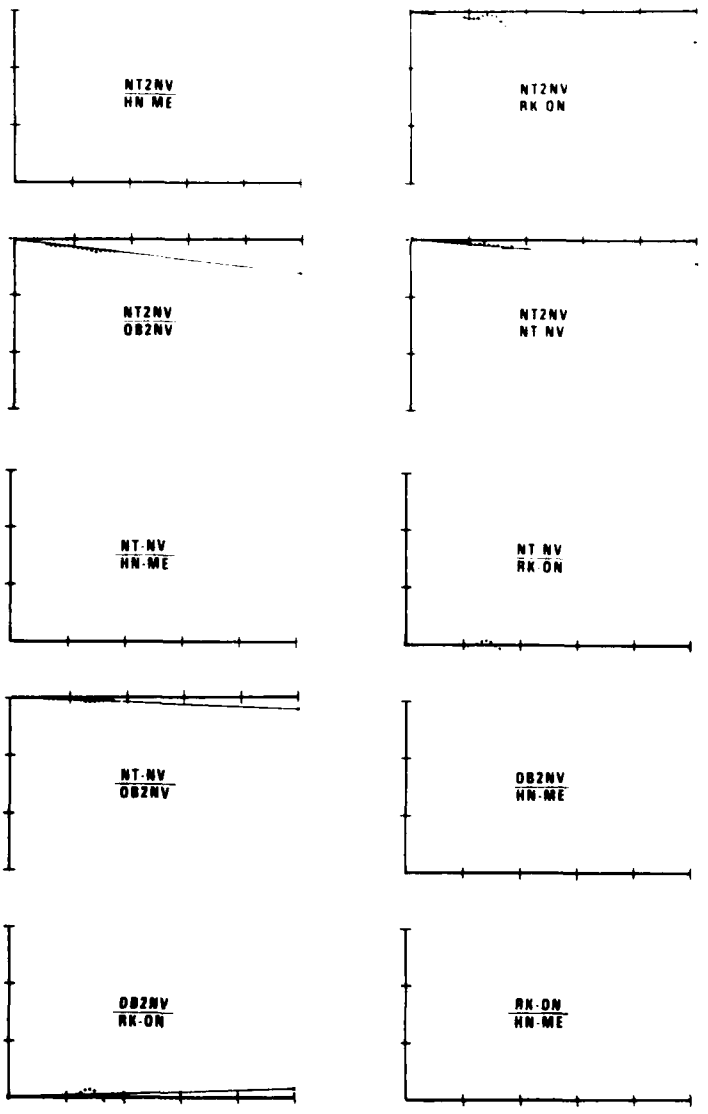



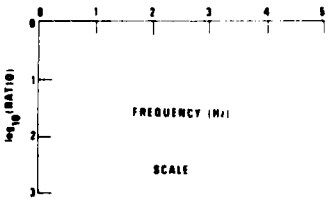
19 MAR 77
10 56 6 8
KURILES
#110



21 MAR 77
4 36 38 0
VOLCANO ISLAND
#114



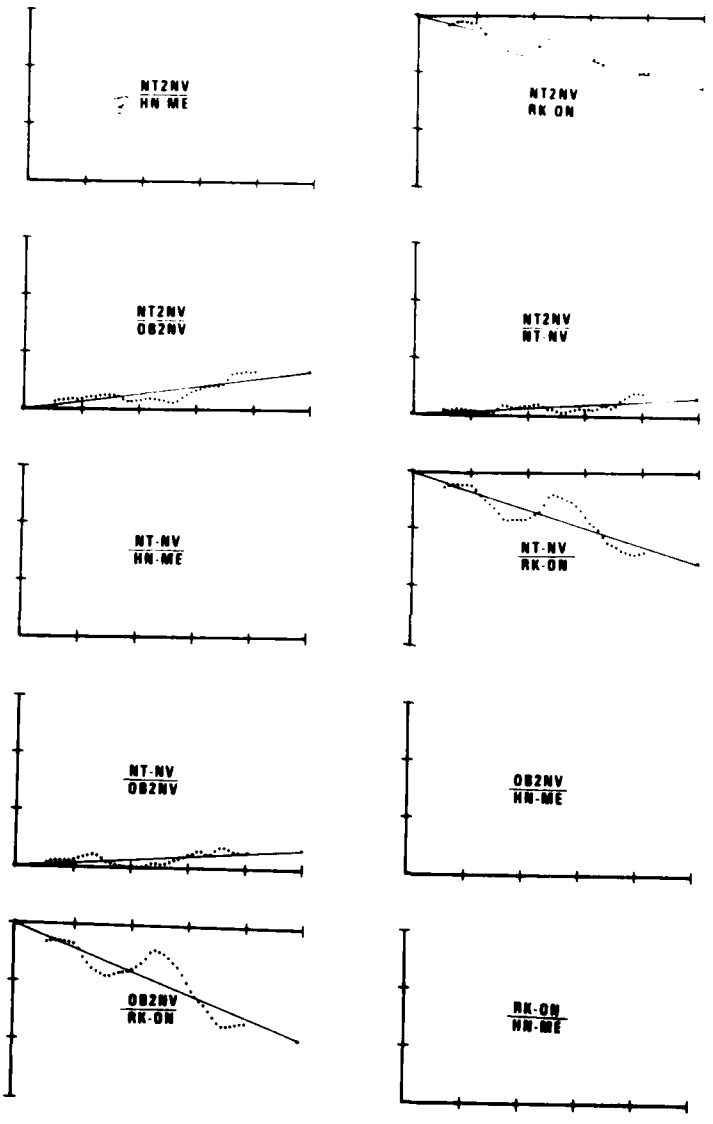



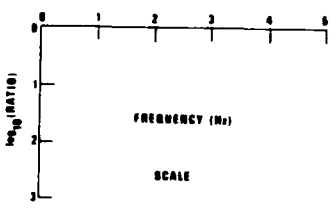
23 MAR 77

2 11 25 8

VENEZUELA COAST

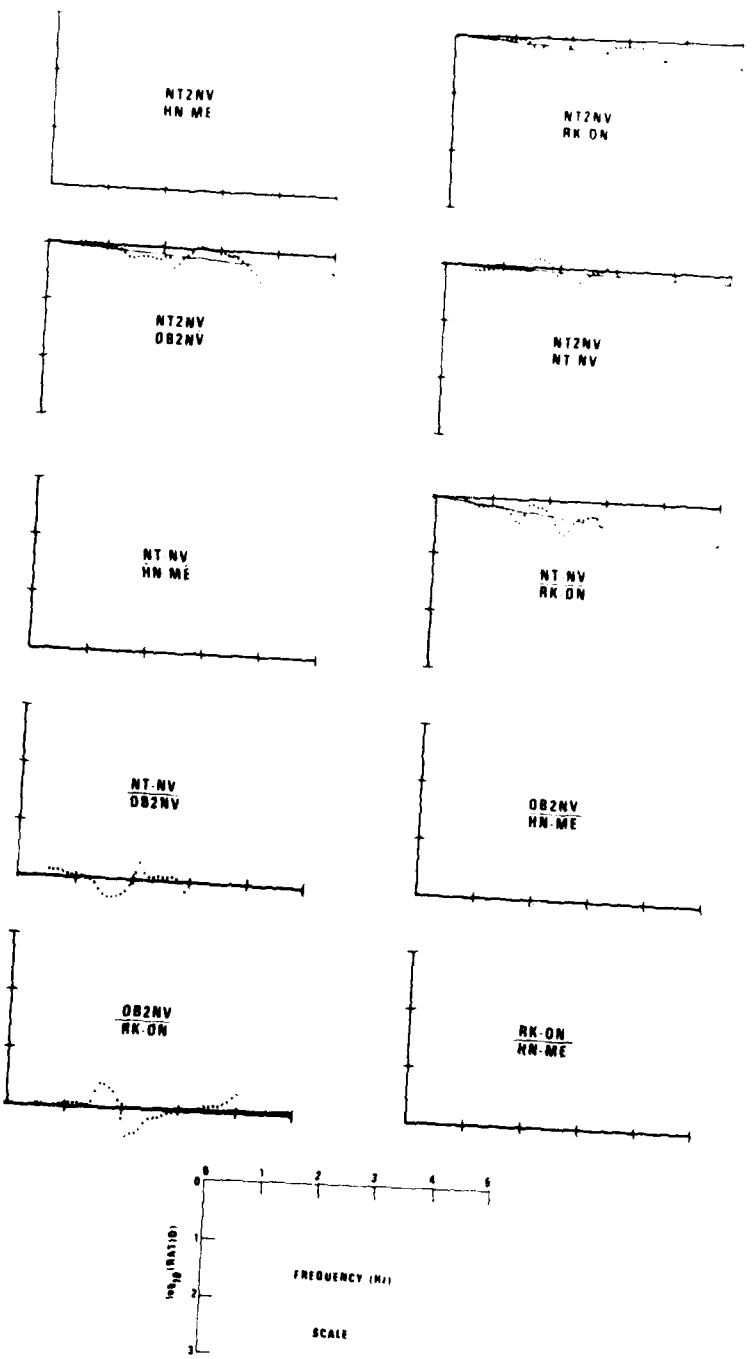
#116

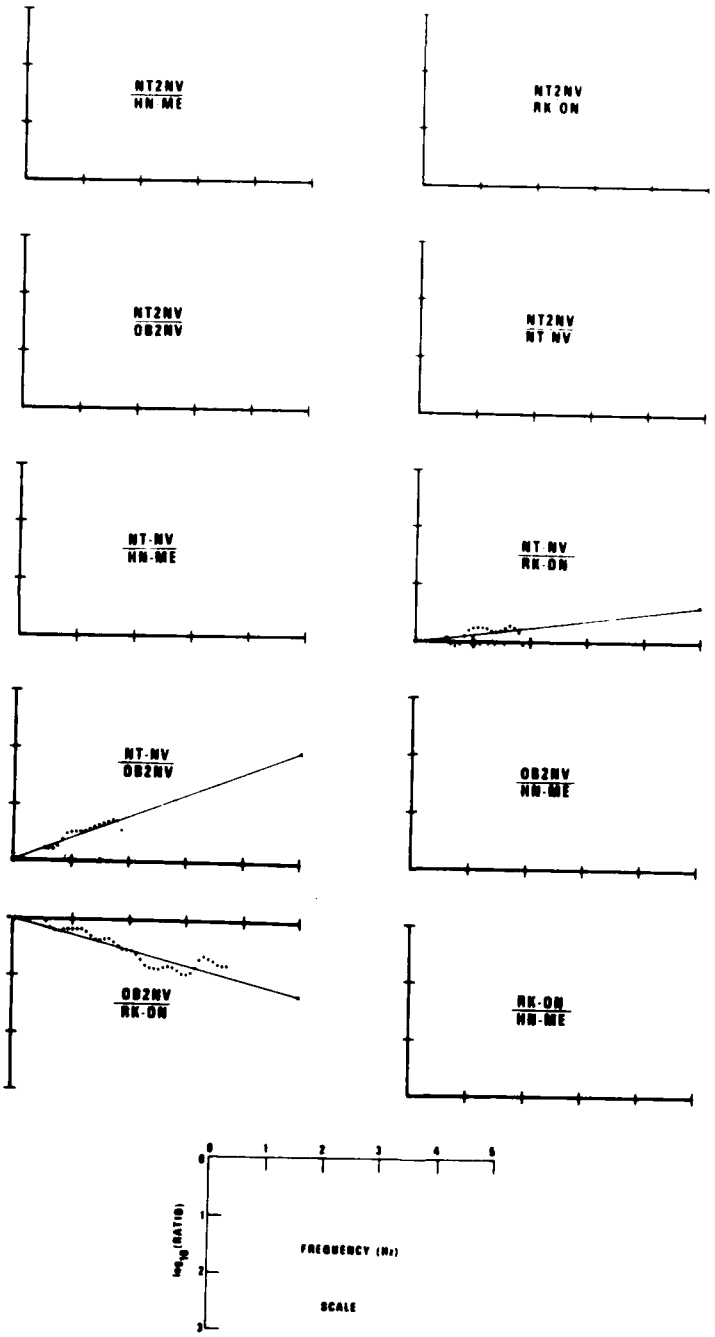


26 MAR 77
4 36 10 0
FOX ISLAND

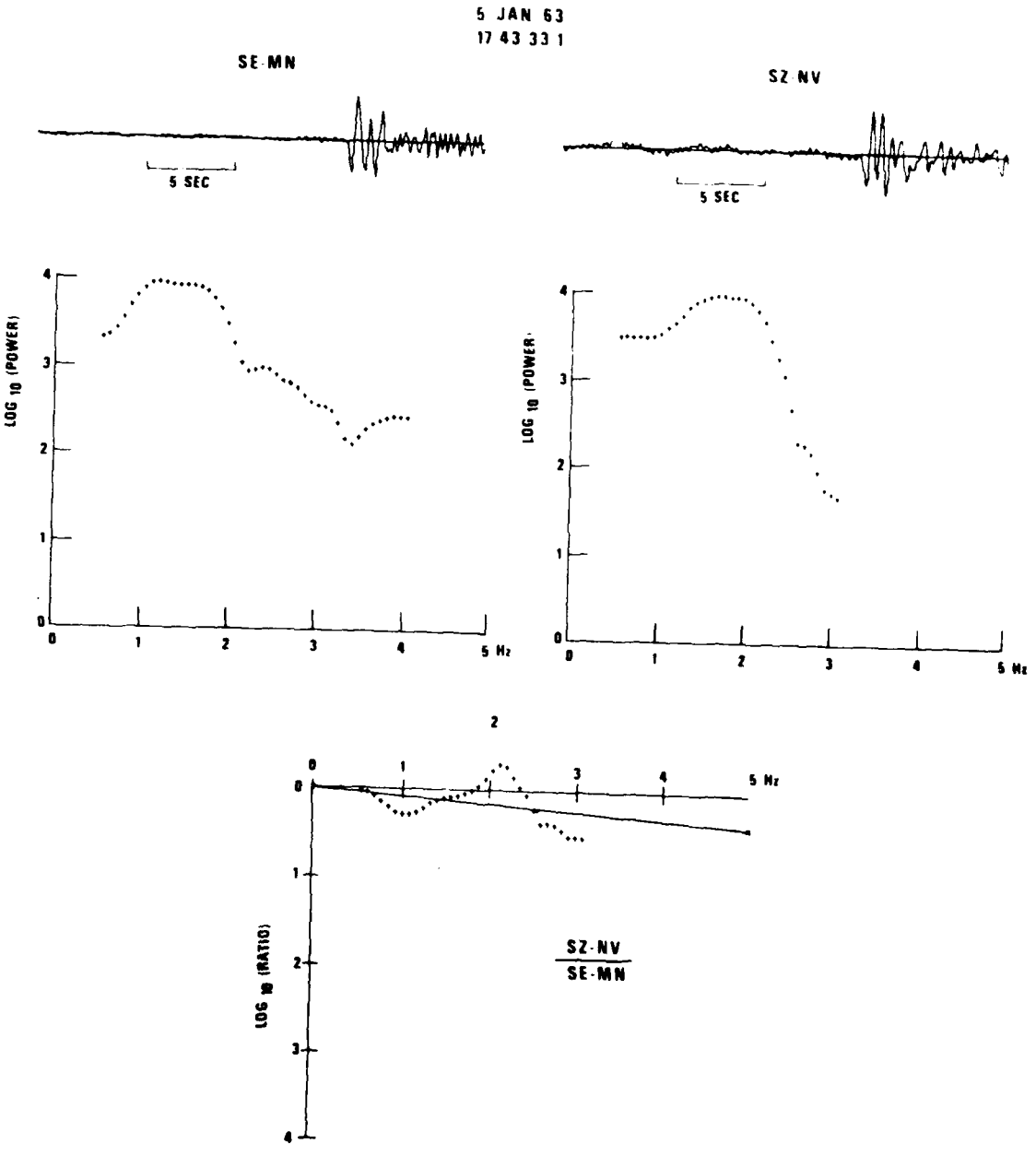
#118

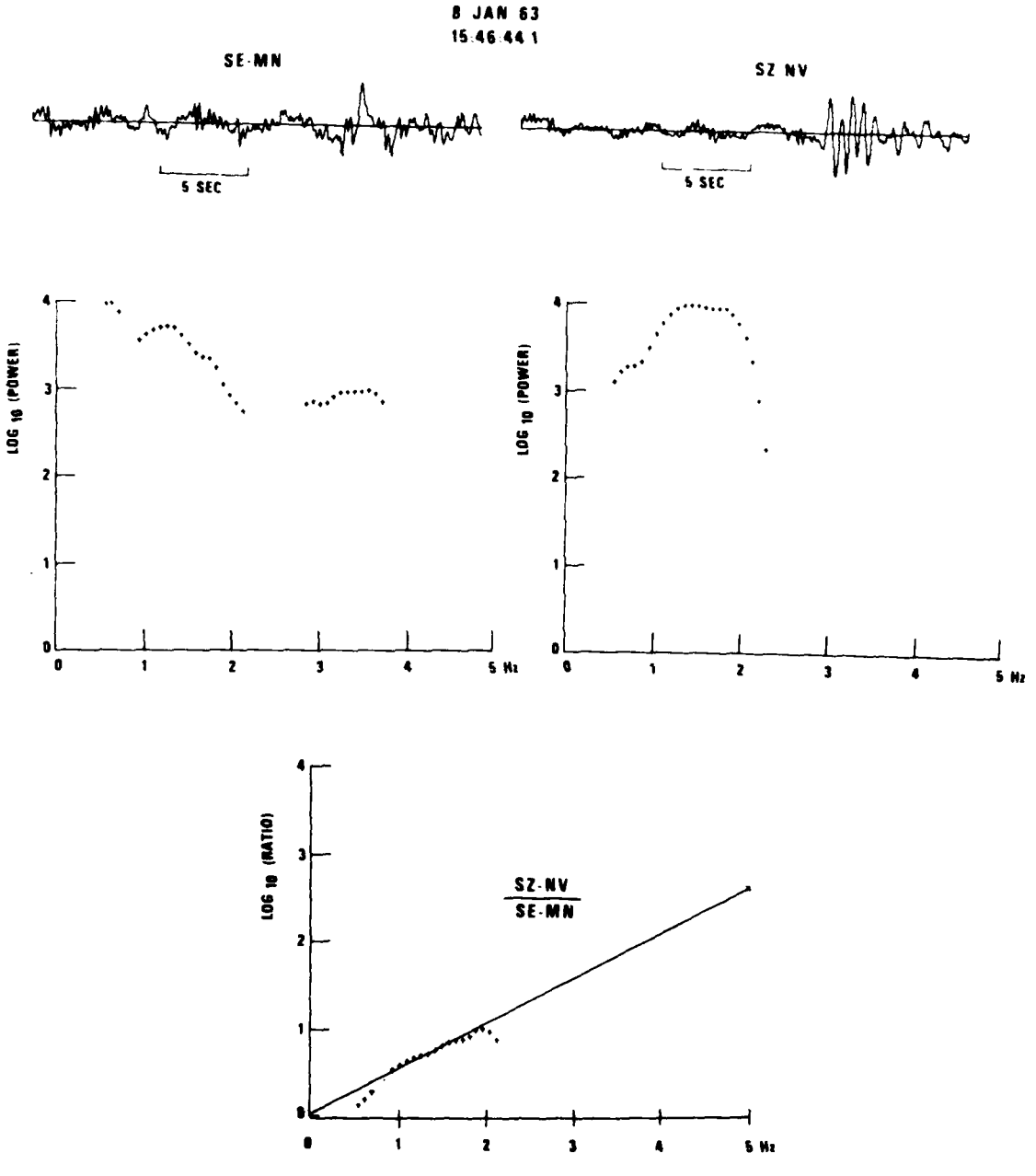


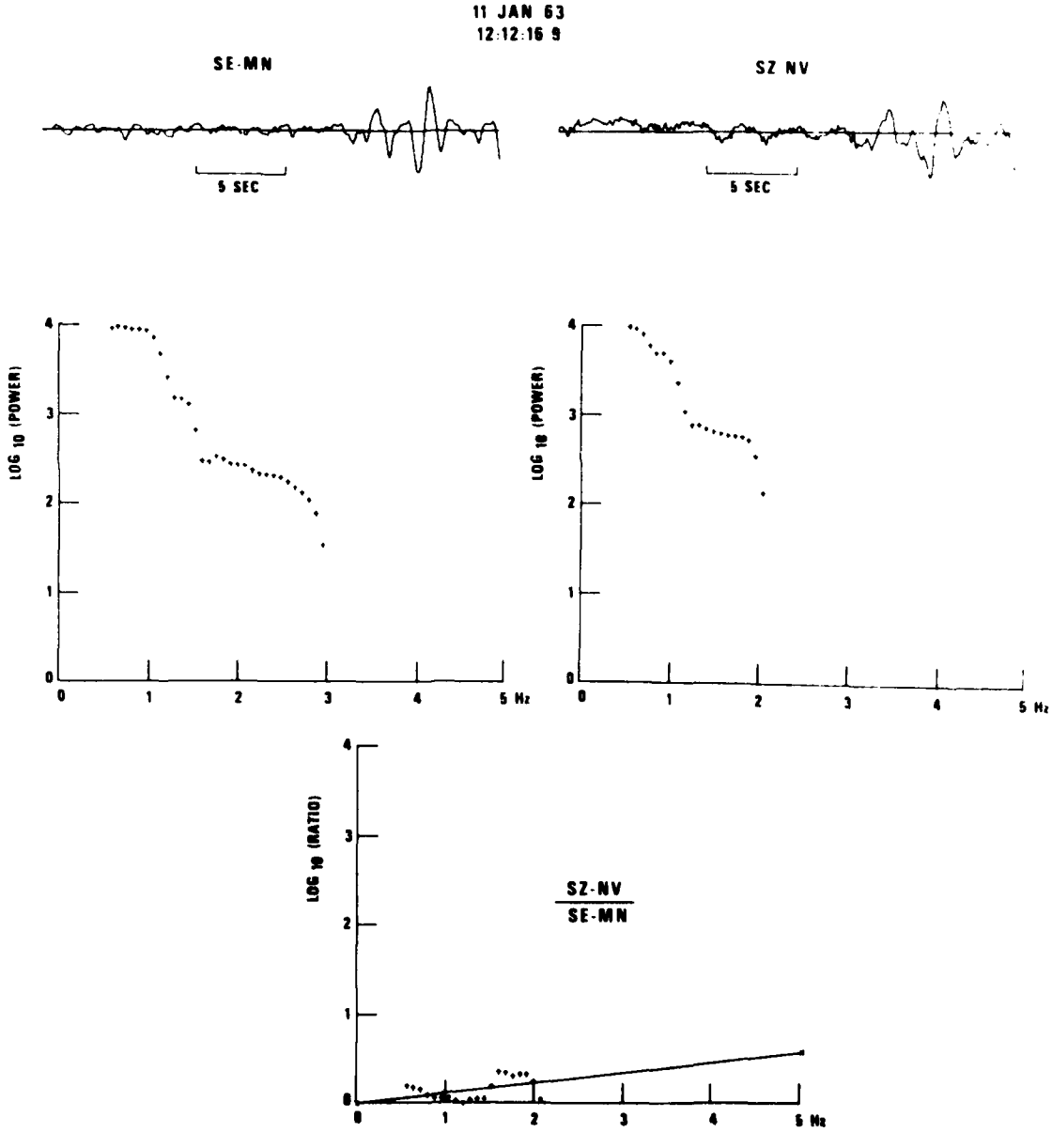

NT2NV / HN-ME
NT2NV / RK-ON
NT2NV / OB2NV
NT2NV / NT-NV
NT-NV / HN-ME
NT-NV / RK-ON
NT-NV / OB2NV
OB2NV / HN-ME
OB2NV / RK-ON
RK-ON / HN-ME
0
1
2
3
4
5
$\log_{10}$ (RATIO)
FREQUENCY (Hz)
SCALE

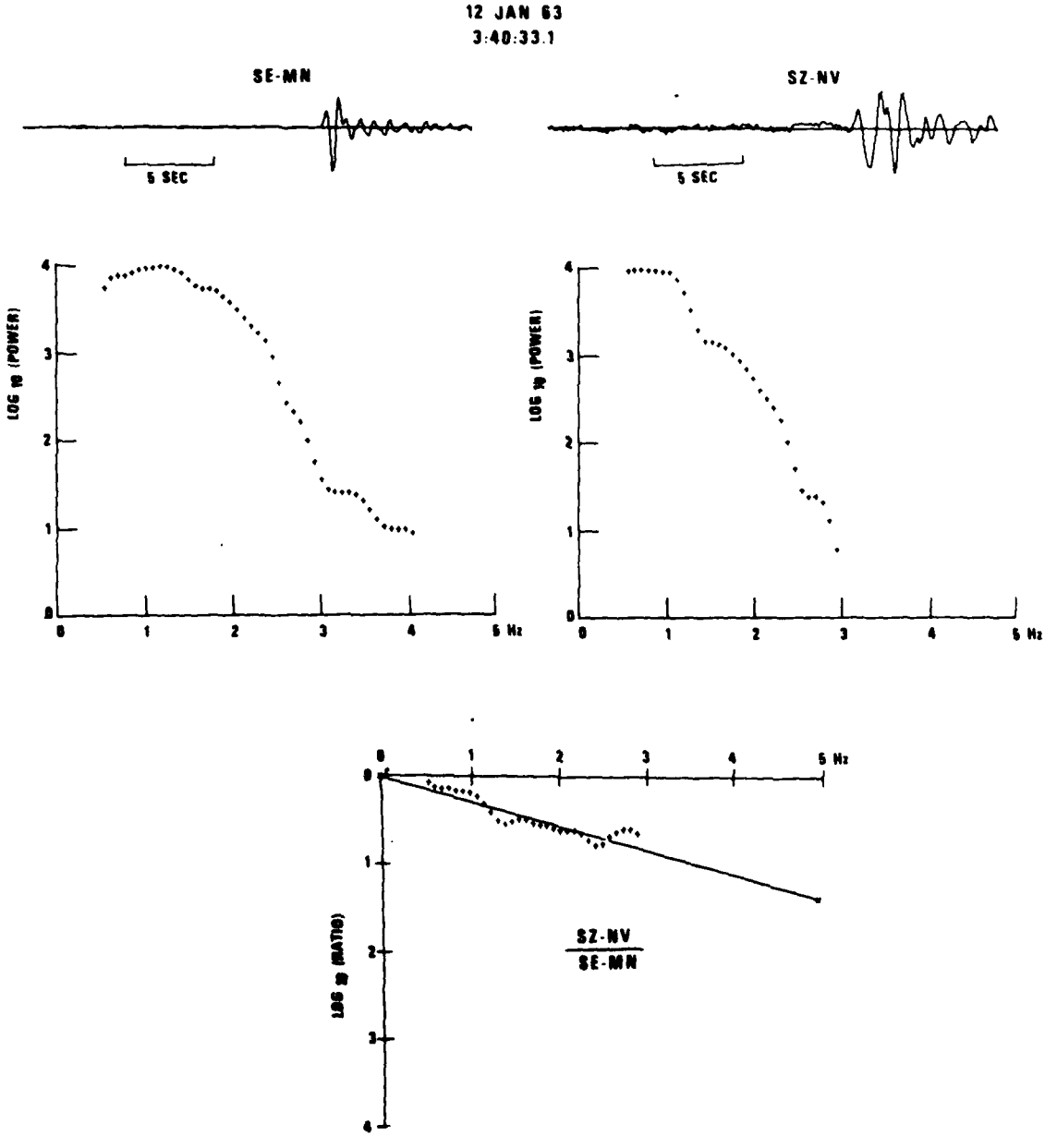
# APPENDIX E

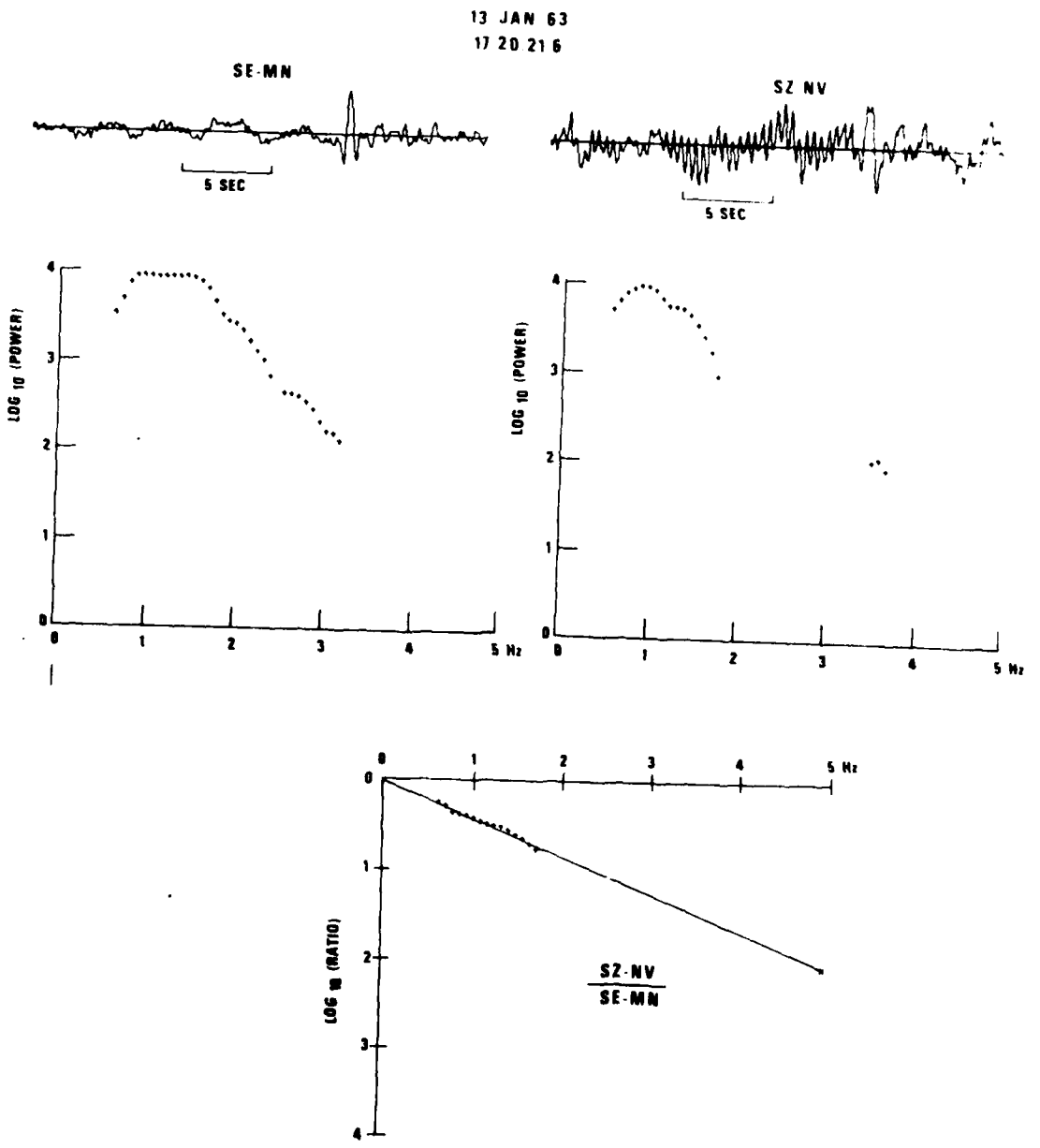
Vertical short period waveforms, power spectra, and amplitude spectral ratios for events at SE-MN and SZ-NV

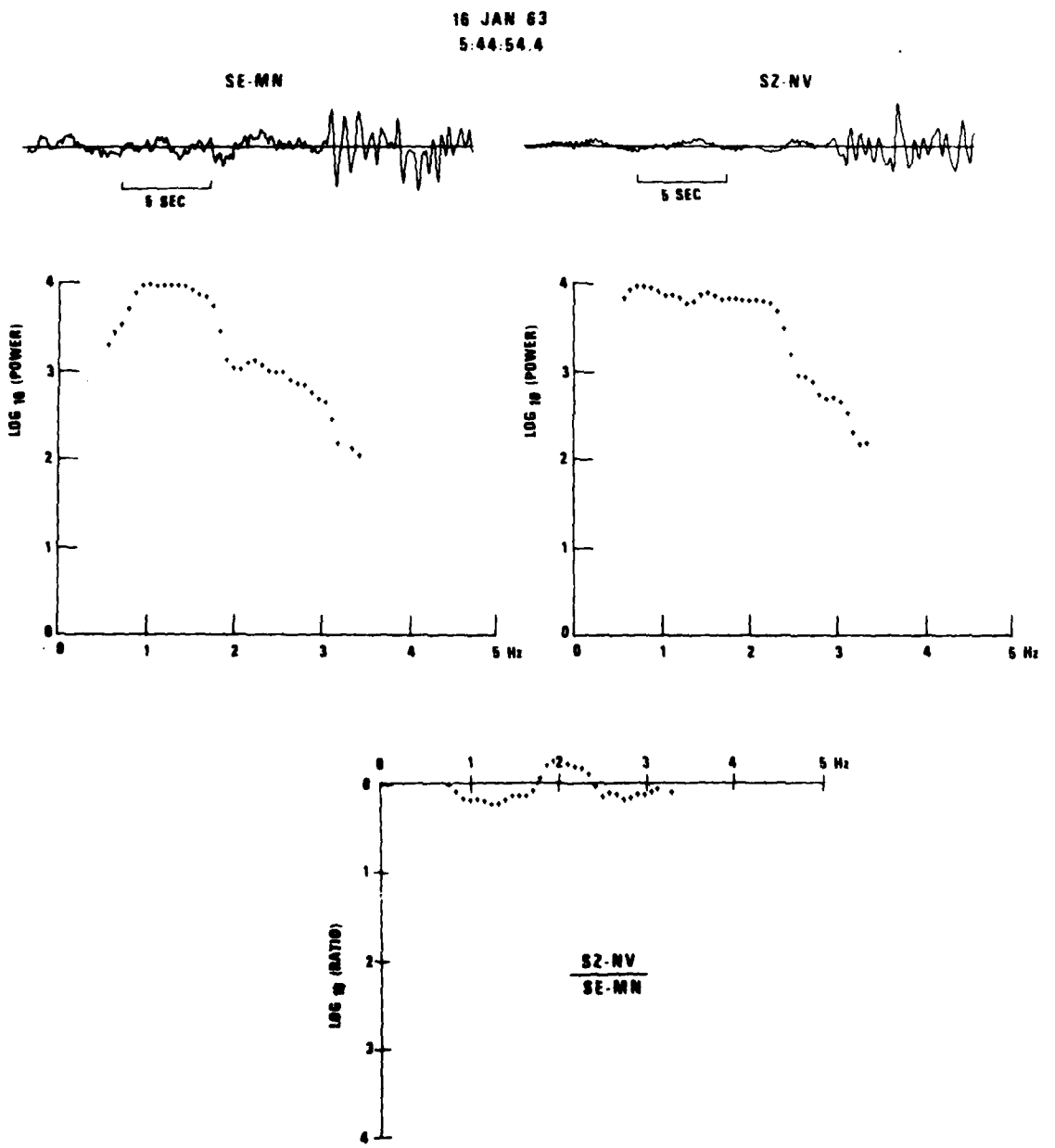

5 JAN 63
17 43 33 1
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
2
LOG 10 (RATIO)
SZ-NV
SE-MN

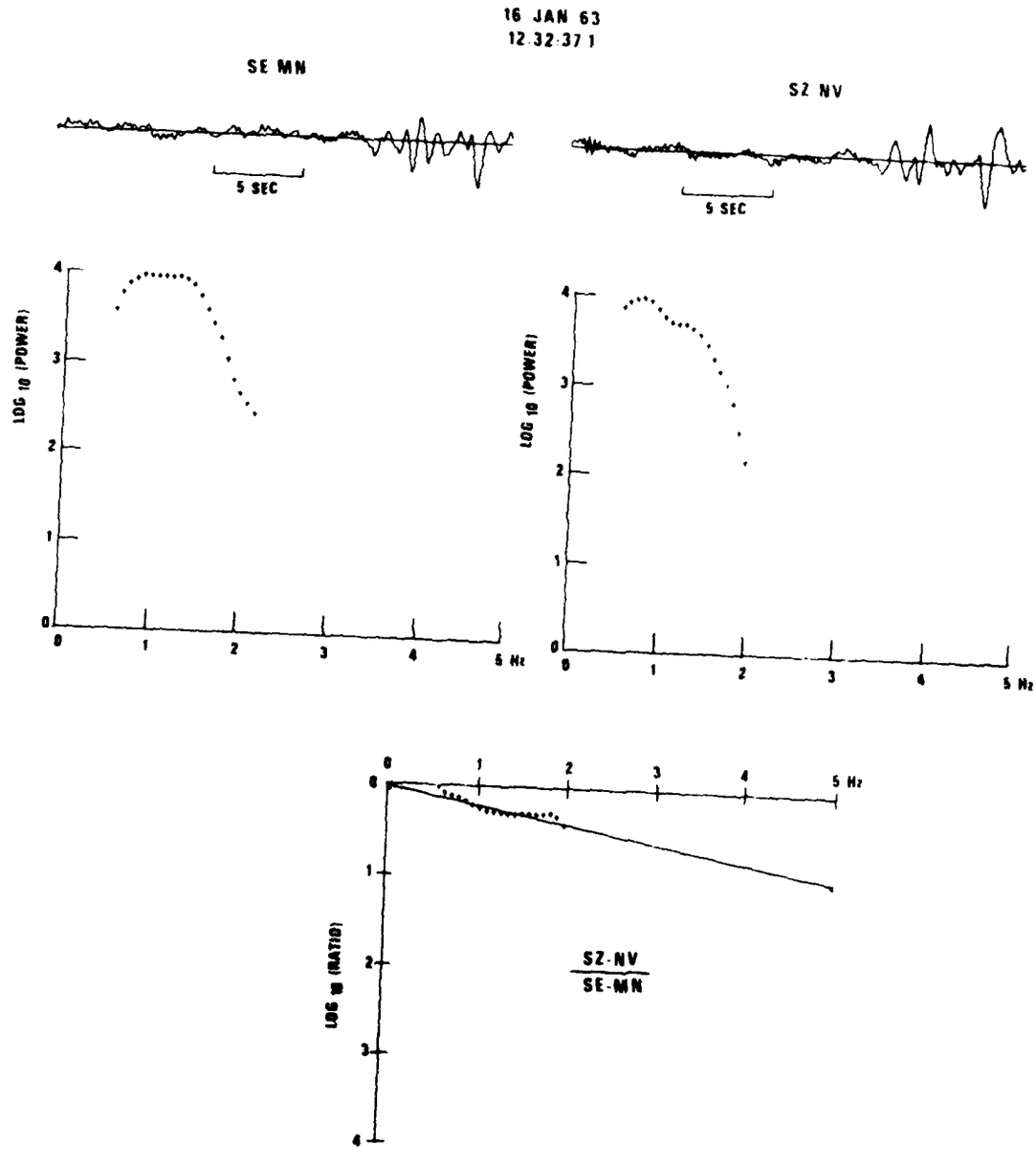

8 JAN 63
15:46:44.1
SE-MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
LOG 10 (RATIO)
SZ-NV
SE-MN
0
1
2
3
4
5 Hz

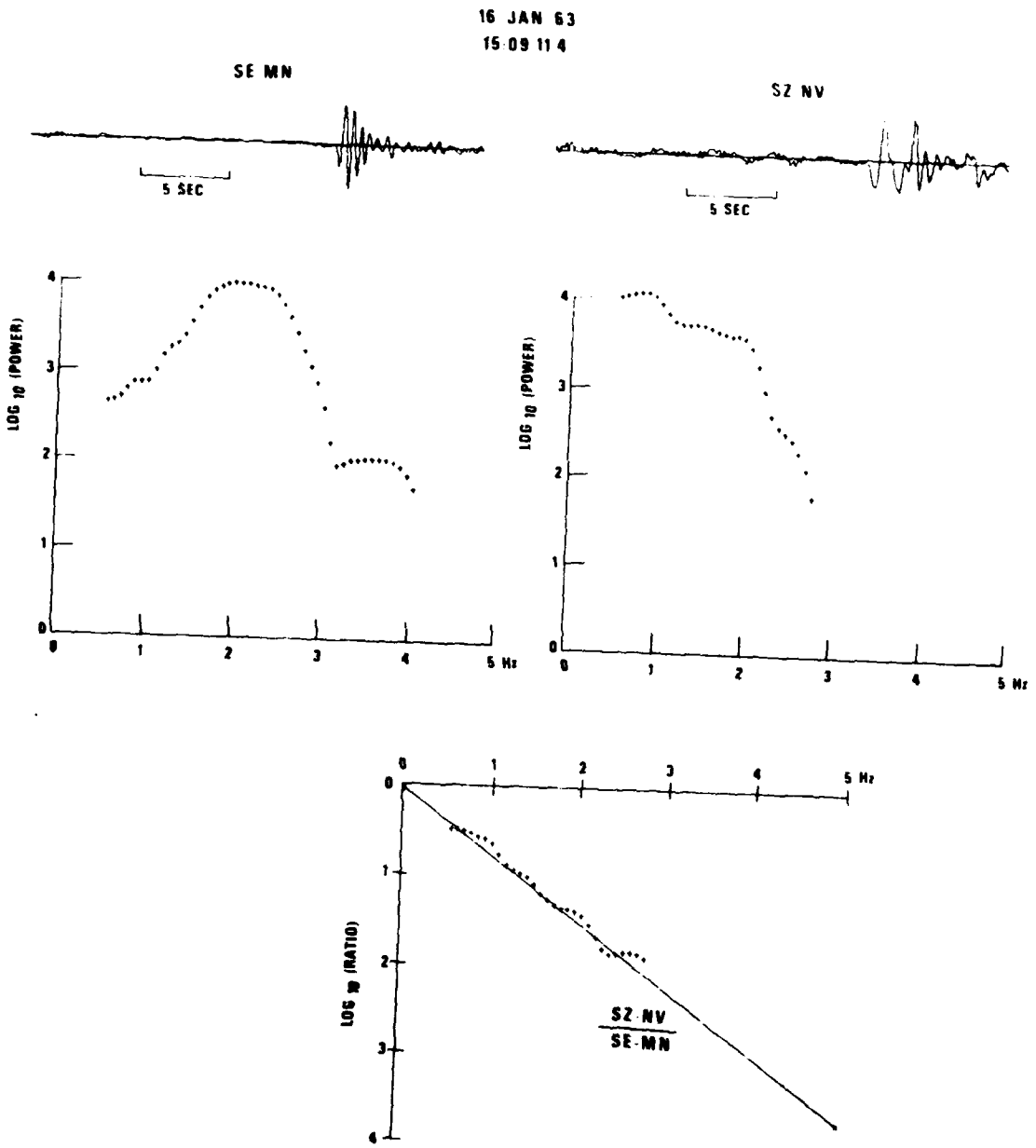

11 JAN 63
12:12:16 9
SE-MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

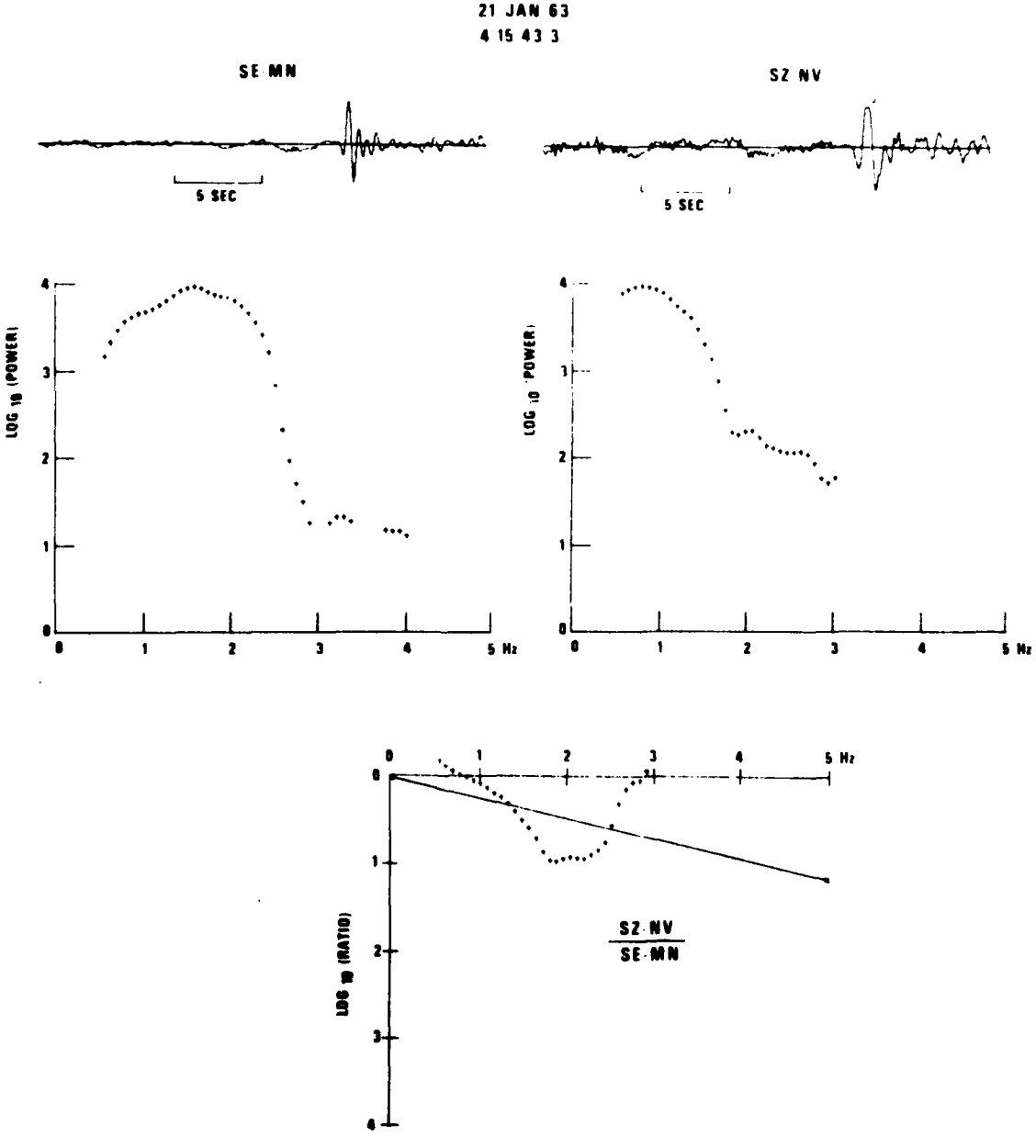

12 JAN 63
3:40:33.1
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
SZ-NV
SE-MN
LOG 10 (RATIO)

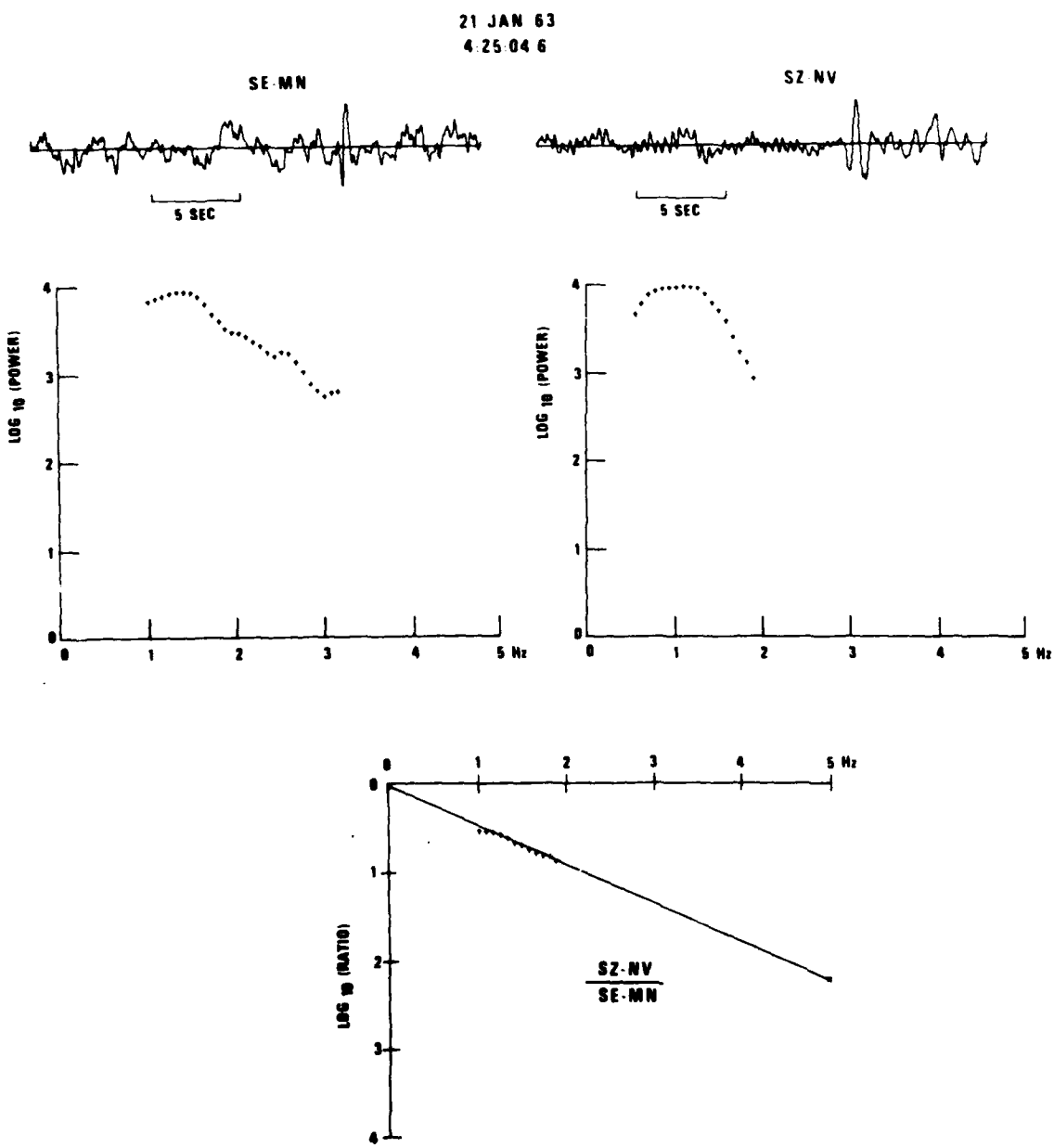

13 JAN 63
17 20 21 6
SE-MN
5 SEC
SZ NV
5 SEC
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

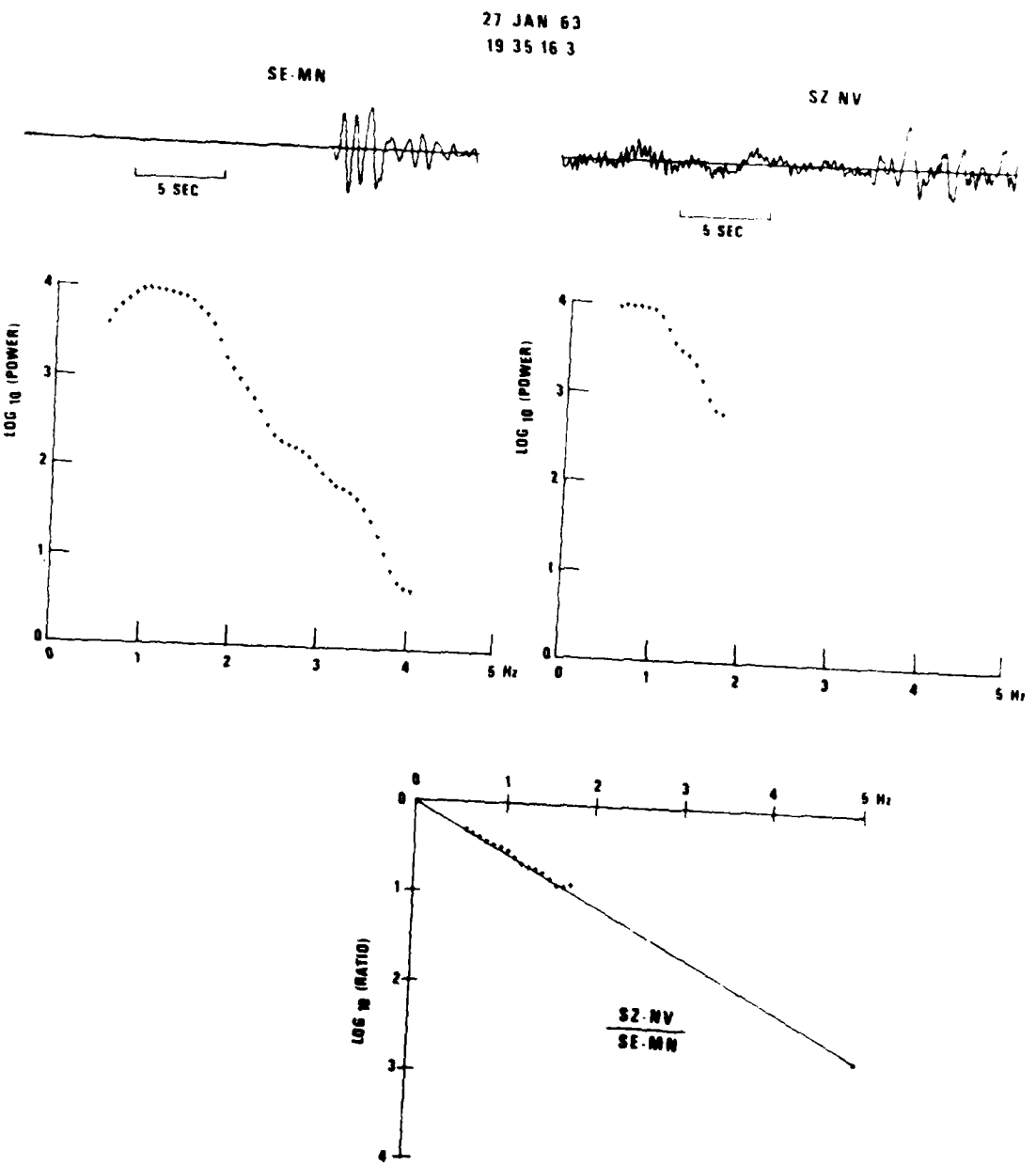

16 JAN 63
5:44:54.4
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
SZ-NV
SE-MN
LOG 10 (RATIO)

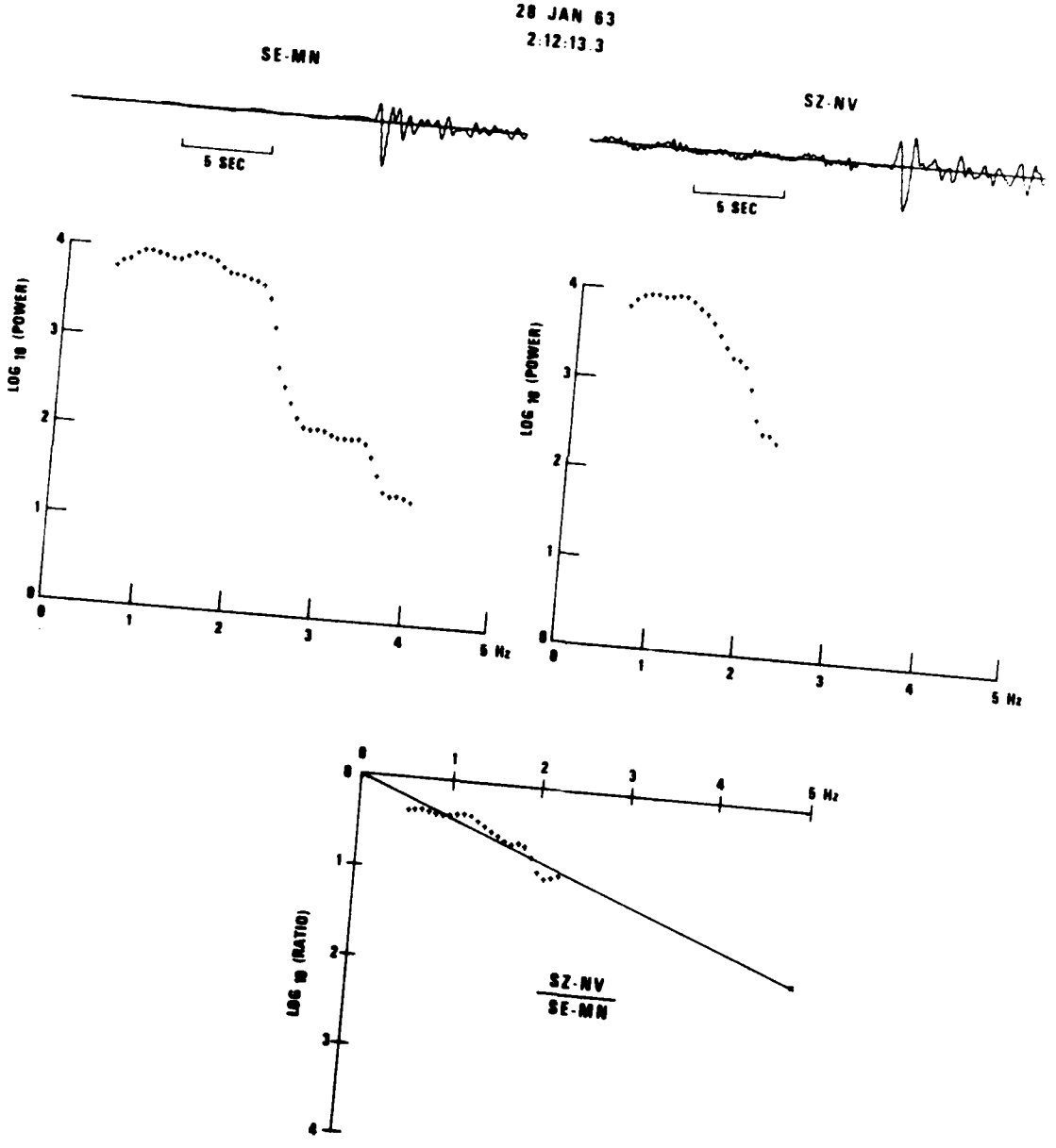

16 JAN 63
12.32.37.1
SE MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

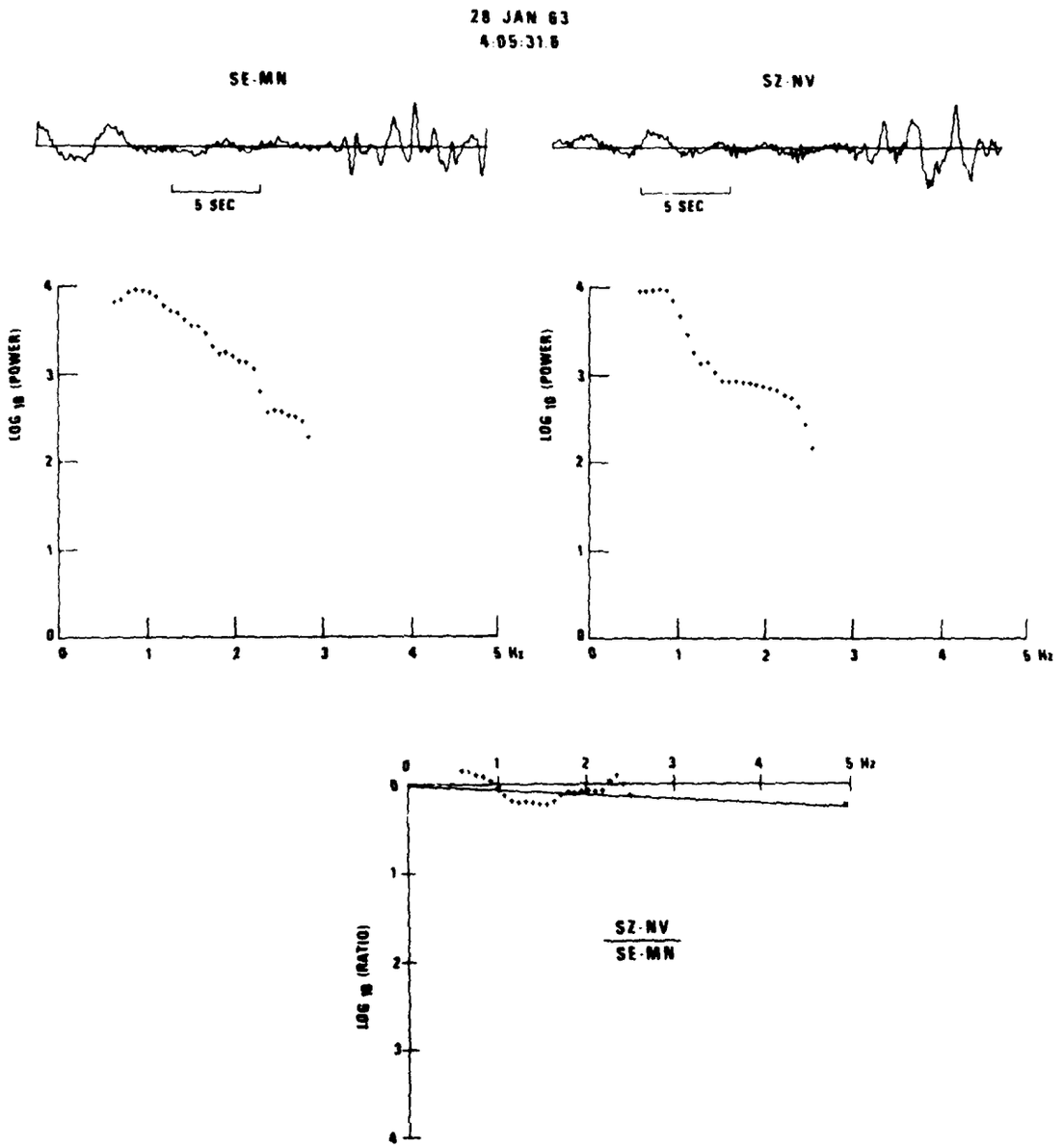

16 JAN 63
15:09 11.4
SE MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ NV
SE MN

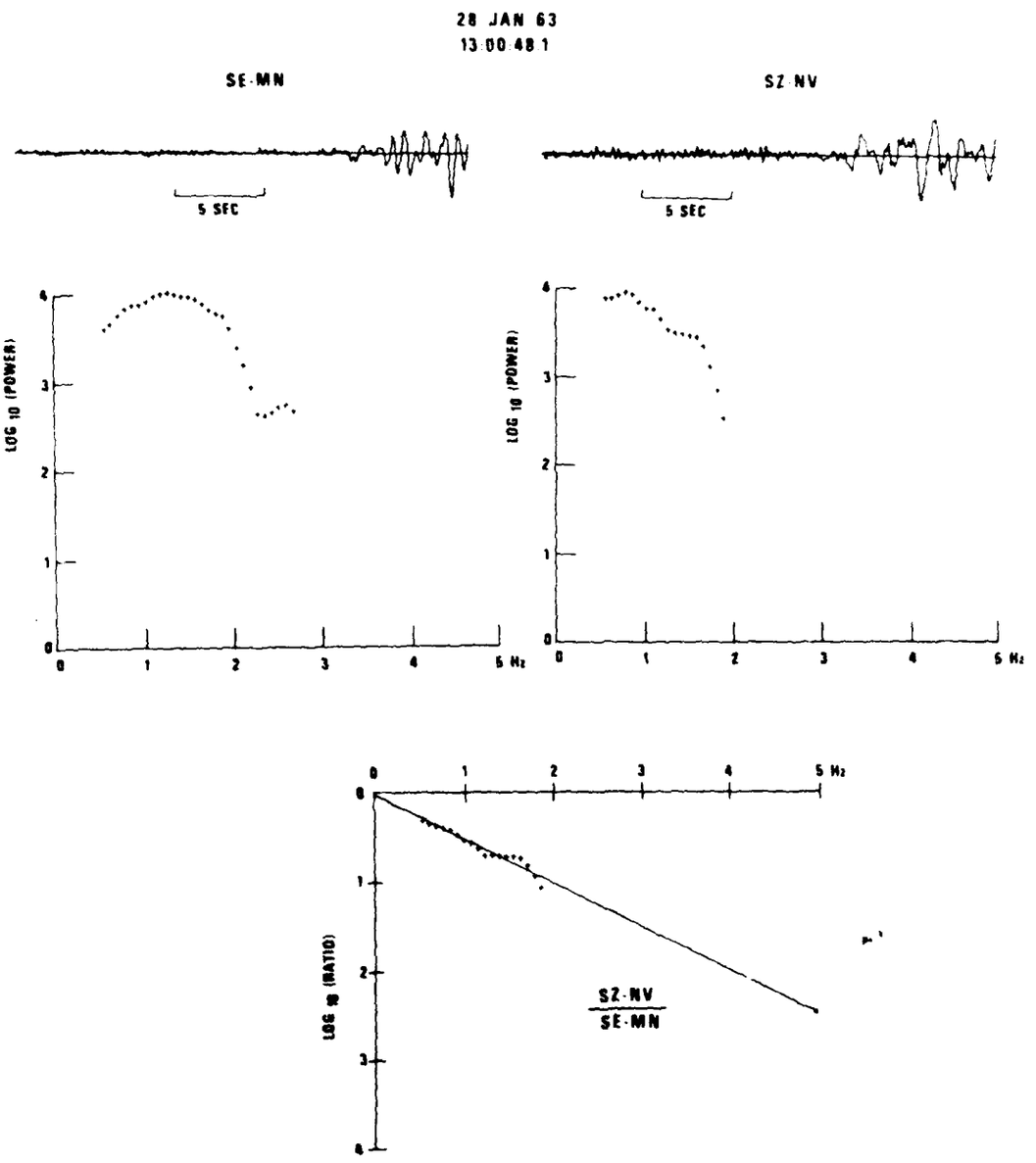

21 JAN 63
4 15 43 3
SE MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0 1 2 3 4 5 Hz
0 1 2 3 4 5 Hz
LOG 10 (RATIO)
SZ·NV
SE·MN

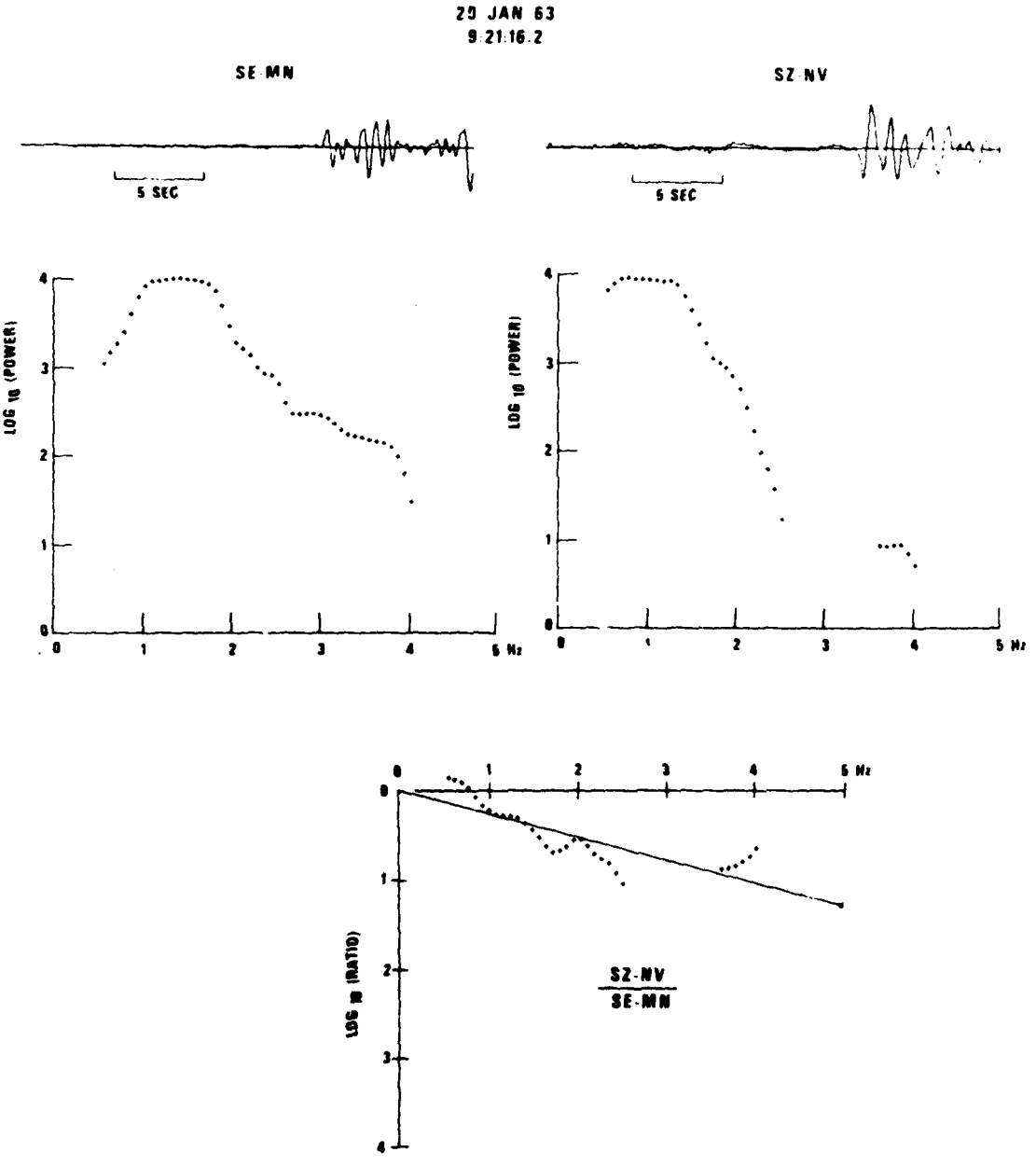

21 JAN 63
4:25:04.6
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

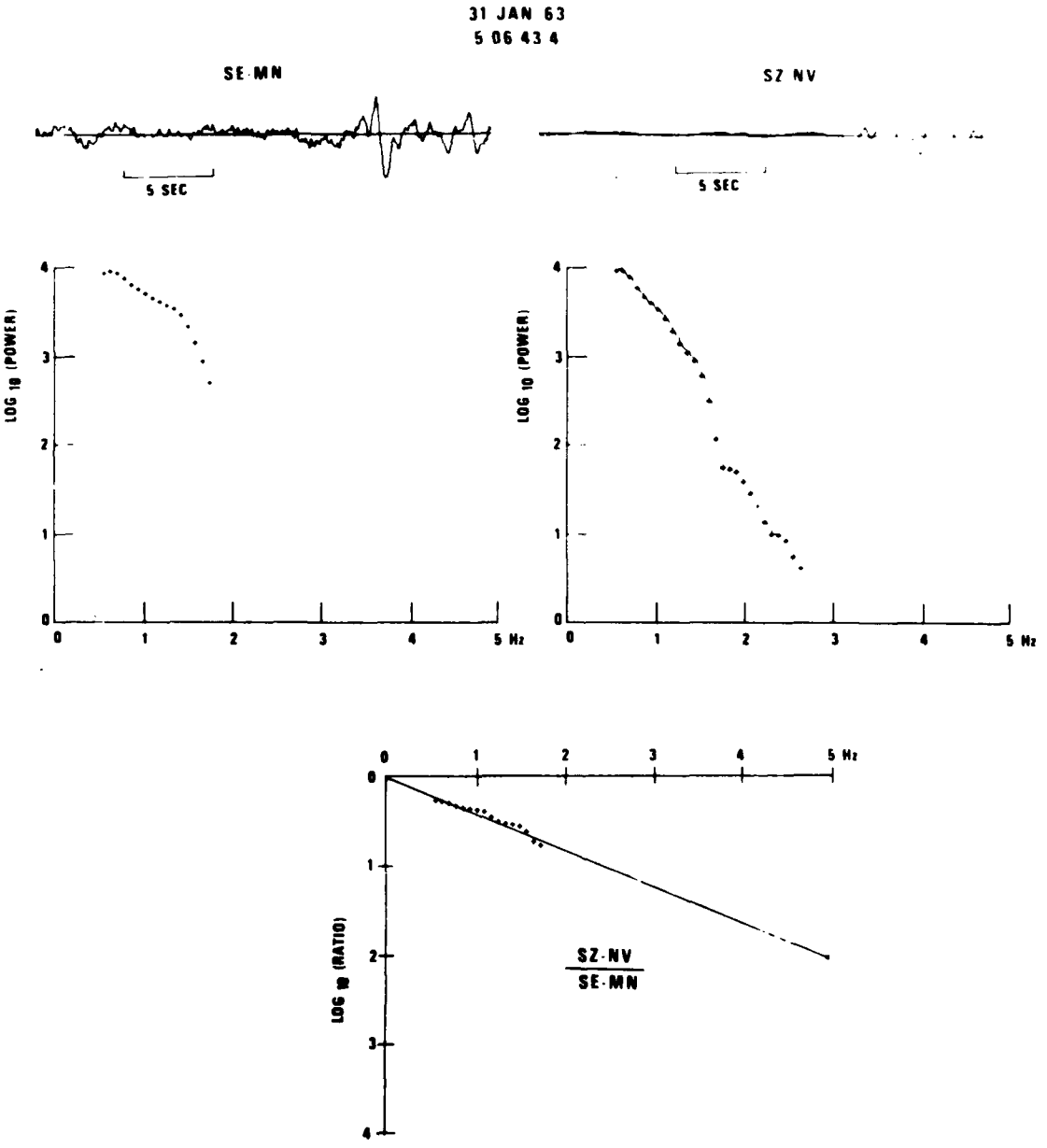

27 JAN 63
19 35 16 3
SE-MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

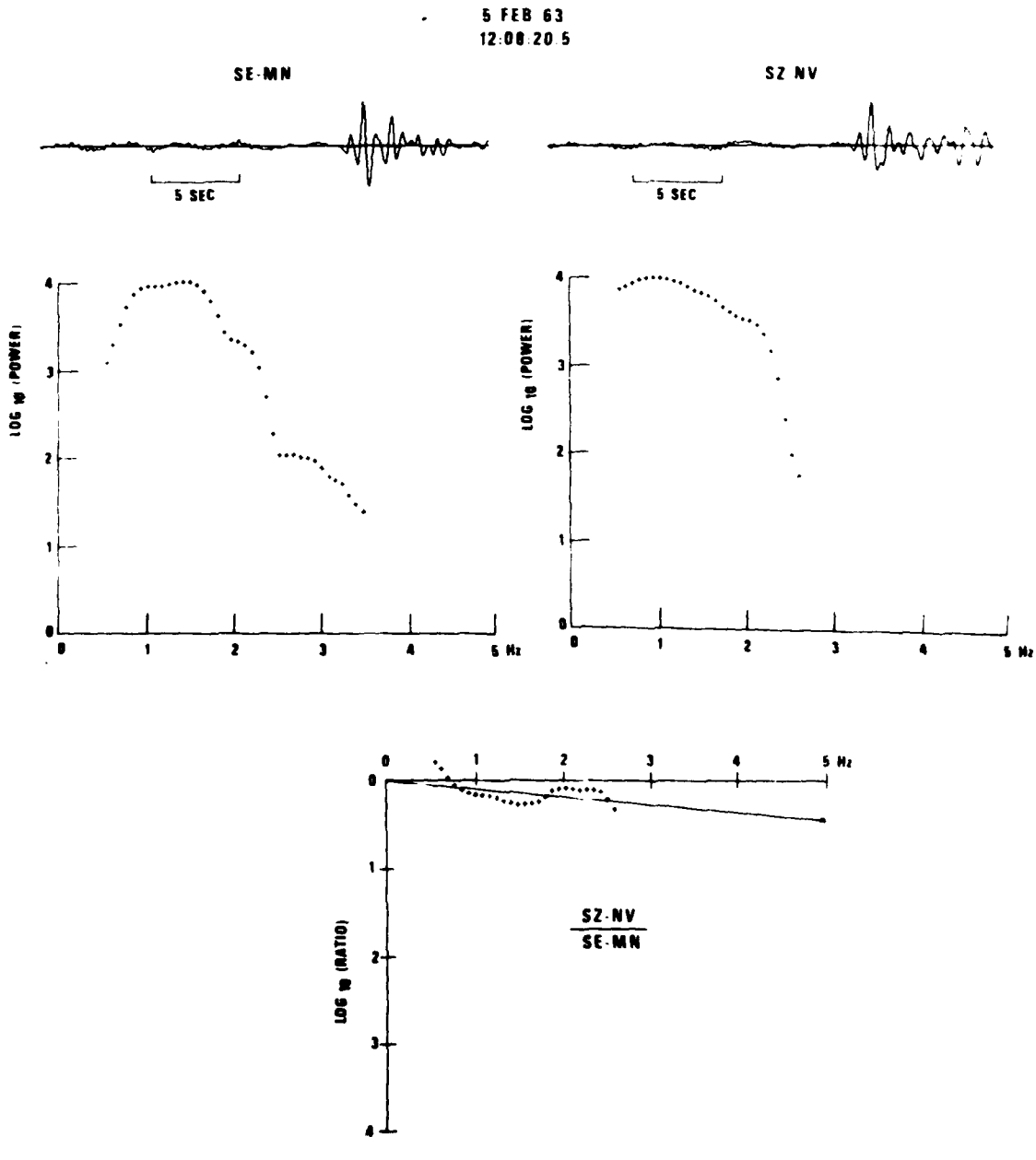

28 JAN 63
2:12:13.3
SE-MN
5 SEC
SZ-NV
5 SEC
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN


28 JAN 63
4:05:31.6
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

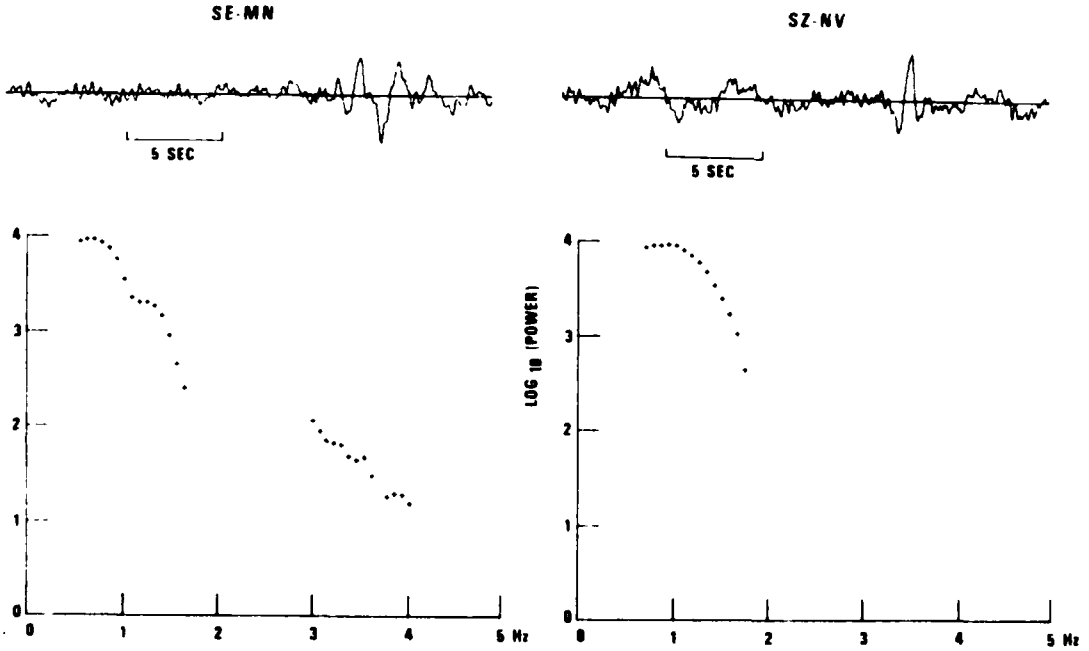

28 JAN 63
13:00:48.1
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

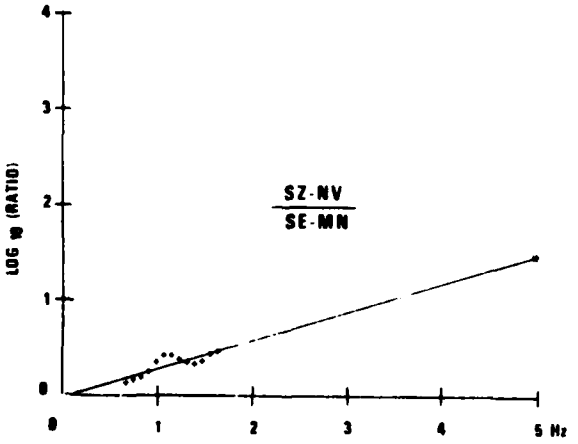

29 JAN 63
9:21:16.2
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN

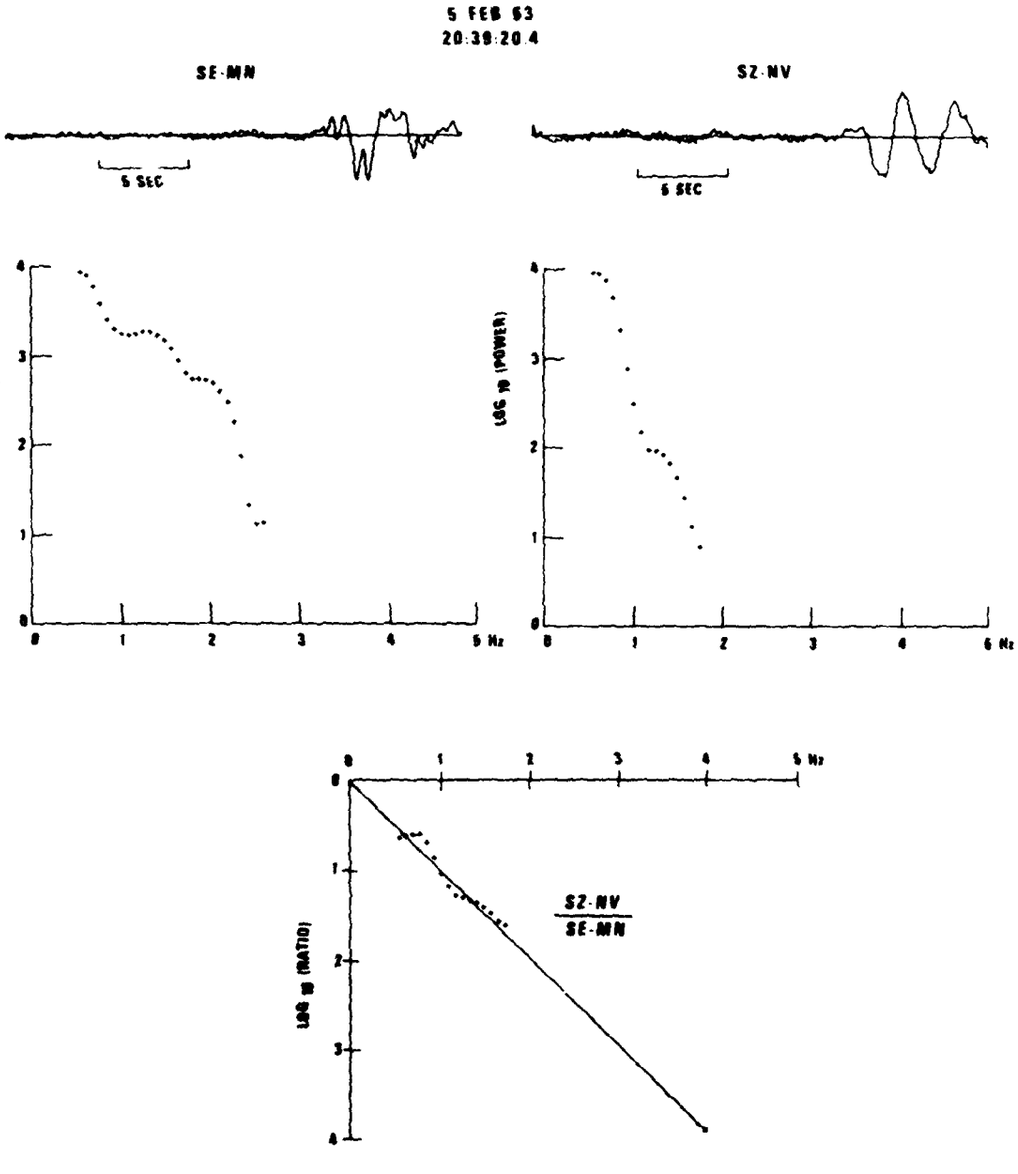

31 JAN 63
5 06 43 4
SE-MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
SZ-NV
SE-MN
LOG 10 (RATIO)

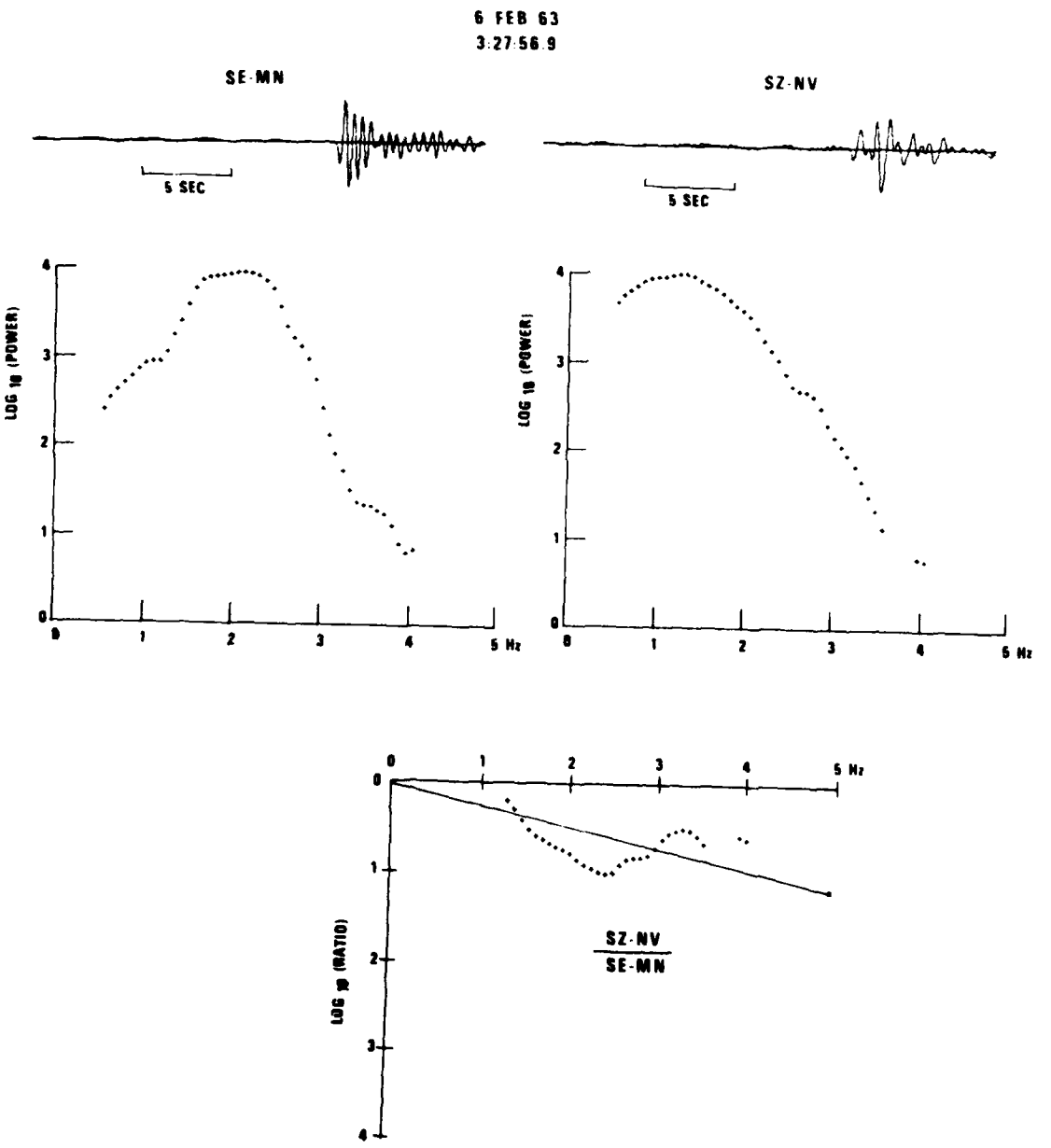

5 FEB 63
12:08:20.5
SE-MN
SZ NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
SZ-NV
SE-MN
LOG 10 (RATIO)

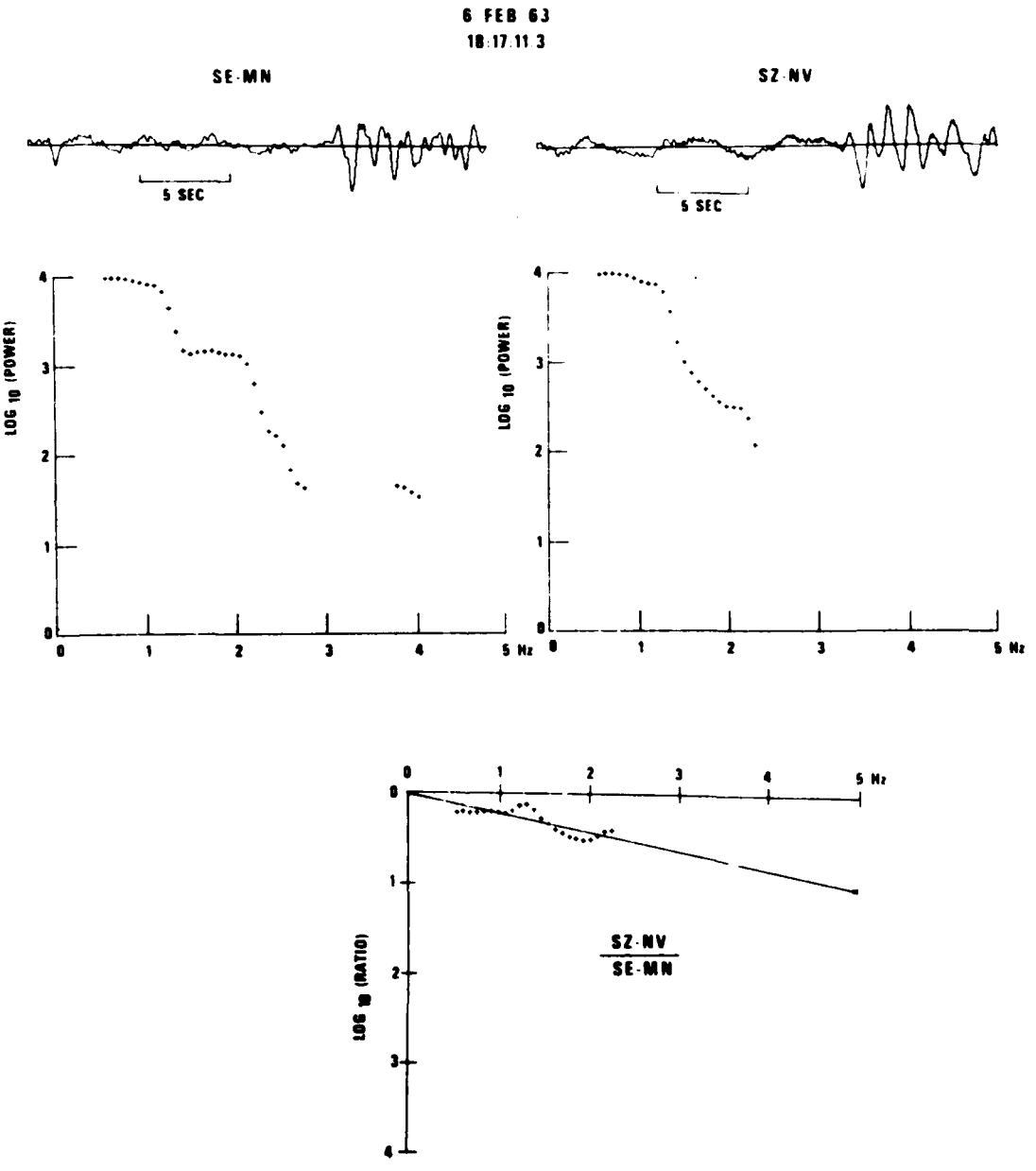
5 FEB 63
17 49 57 3




5 FEB 83
20:38:20.4
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
6 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN


6 FEB 63
3:27:56.9
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
SZ-NV
SE-MN
LOG 10 (RATIO)


6 FEB 63
18:17.11 3
SE-MN
SZ-NV
5 SEC
5 SEC
LOG 10 (POWER)
LOG 10 (POWER)
0
1
2
3
4
5 Hz
LOG 10 (RATIO)
SZ-NV
SE-MN